Unit 3: Herbs for Childbearing Women

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HERBAL MEDICINE FOR WOMEN

Unit 3 Lesson 27

Learning Objectives

At the end of this lesson students should be able to:

1. Understand the possible risks of using herbs during pregnancy
2. Describe the unique risks of using herbs during the first trimester of pregnancy
3. List the categories of herbs that are contraindicated for use during pregnancy
4. Describe how form, dose, and duration of using an herb affect its safety during pregnancy
5. Differentiate between the terms teratogen, mutagen, emmenagogue, and abortifacient
6. Provide examples of the most commonly available and utilized emmenagogues and abortifacients

7. List the major common concerns and medical problems associated with each trimester.
8. List the warning signs that might occur during pregnancy that signal the need for immediate medical attention
9. Recognize commonly used herbs that are contraindicated for ingestion in pregnancy

Note that herb safety during breastfeeding is discussed in *Lesson 41: Postpartum Care, Breastfeeding Problems, and Postnatal Depression*.

Required Reading

Botanical Medicine for Women's Health, 2nd edition (Romm)

- Pregnancy and Botanical Medicine: Use and Safety, pp 351-362

Herbs in Pregnancy: What's Safe, What's Not?

Key Terms

Be sure to familiarize yourself with the definitions for all key terms. These can be found in the course resources or using an on-line medical dictionary.

Abortifacient

Alkaloid

Adulteration

Contamination

Emmenagogue

Mutagen

Parturient

Partus preparator

Teratogen

Key Botanicals for this Lesson

Students are not expected to know the actions, common uses, forms of administration, etc, of every herb on the list of Herbs Contraindicated for Use in Pregnancy in Botanical Medicine for Women's Health.

Students should be familiar enough with the names of the herbs on this list that if you hear one of these herbs listed in a pregnant woman's herbal formula, a red flag goes up for you and should refer to this list or the Botanical Safety Handbook, most recent edition) when consulting with pregnant and nursing women about the use of herbs.

Introduction: Botanical Medicine Safety During Pregnancy

(Read or listen to the recording in the audio section on this page)

Pregnancy is the most sensitive time in human development and many substances cross the placenta, so naturally, there are important questions about the safety of using herbs during pregnancy. Unfortunately, most herbs have not been evaluated for safety in the childbearing cycle, thus there is little scientific evidence to support — or refute — their safety during this time. Ethical considerations surrounding experimentation on pregnant women and the need for large sample sizes severely limit human clinical investigation during pregnancy. This lesson elucidates some of the key issues surrounding the use of herbs during pregnancy.

Herbalists have a fantastic opportunity to participate in helping women to achieve optimal pregnancy health through education about nutrition, lifestyle, and cultivating positive attitudes about childbearing as a natural process. Many minor common concerns ranging from nausea during pregnancy to pain during labor to hemorrhoids in the postnatal period, can often be effectively addressed with herbal medicines. Since pregnancy is such a highly sensitive time for the developing embryo/fetus and a time when complications in the mother can have serious and even quickly dire or fatal consequences for the mother, baby, or both, a great deal of care and knowledge, and a good obstetric and midwifery referral network are required if one is to include pregnant women in their client base.

Modern Obstetrics: A Commentary

The past few decades have wrought numerous advances in obstetric care, yet with this has come an increased reliance on technological solutions and a near complete medicalization of pregnancy and birth.

Clearly there are times when medical interventions in pregnancy are warranted, however the safety and efficacy of the routine use of most of these interventions is not clearly demonstrated and much of modern obstetric practice is not adequately evidence based. . Indeed, there is a striking lack of evidence-based medicine in obstetrics. Further, there is little emphasis on health education and the prevention of problems through healthful diet, exercise, and lifestyle in conventional obstetric medicine. There is a striking disregard for the benefit of natural therapies in spite of the fact that herbs are used worldwide by midwives, and by childbearing women, and even the World Health Organization has encouraged the local promotion of midwifery and traditional medicine practices. Obstetrics cannot improve upon nature, yet pregnancy and birth are seen as inherently dangerous processes from which women need to be protected.

Modern obstetrics, by its very interference in the birth process has accomplished less by trying to do more. Marsden Wagner, MD. former Director of the World Health Organization's European Regional Office, remarked at an international medical conference that hospital births "endanger mothers and babies — primarily because of their impersonal procedures and overuse of technology and drugs". The list of routine interventions and the frequency of their application has been steadily increasing, particularly in the United States.

Cesarean section is the most frequently performed surgery in the United States, and the most frequently performed unnecessary surgery. Current national statistics reveal a cesarean section rate that is alarming: nearly one in three

women having a baby in the United States will undergo a cesarean. When I interviewed for residency positions in obstetrics and gynecology, most hospitals in the New England states in which I interviewed had c-section rates of 40 percent. The lowest c-section rate I encountered was 38% at one hospital. When normal pregnancy is treated like a disease, it has a very poor outcome.

Undoubtedly under specific circumstances, obstetric technologies outweigh the risks associated with them. They can be life-saving to the mother, baby, or both and all women should have access to these technologies. However, what tends to happen when access to technology is widely available and when there are motives for their use beyond simple health care need (fear of lawsuits, malpractice insurance costs, driving need for profit), is that these technologies become broadly applied in a population where their use is not warranted.

It's in this context that many pregnant women seek out botanical therapies to pharmaceutical medications, believing them to be safer and gentler or because they feel that the use of herbs is more philosophically harmonious with their overall belief that childbearing is a natural event.

More midwives and even obstetricians than ever include recommendations for herbs in their repertoire – especially for very minor, common symptoms, but according to studies, most lack adequate knowledge of botanicals – one of the reasons this course exists is to fill that gap!

Natural is not always more effective - or even safer- so knowing if and when herbs can be used – and useful – so you can guide clients to the best approaches for any given situation is important. But to be able to do so safely and effectively it's essential that anyone working with women in the perinatal period be highly knowledgeable about issues in perinatal care and to be incredibly respectful of their own limits of knowledge and experience. It's essential that you know which herbs are considered safe for use in pregnancy, which are thoroughly contraindicated in pregnancy and lactation, and what to do about herbs in the "gray zone" (hint: when in doubt, leave 'em out!) when a specific question about whether they're okay to use arises.

It's also essential to know the warning signs that – at any time during pregnancy or postpartum –suggest that there may be an urgent and serious medical problem:

- Persistent vaginal bleeding
- *Initial* outbreak of herpes blisters during pregnancy
- Severe pelvic or abdominal pain
- Persistent, severe mid-back pain
- Swelling of the hands/face, significant lower extremity swelling
- Severe headaches, blurry vision, or epigastric pain
- Rupture of membranes prior to 37 weeks pregnancy
- Regular uterine contractions prior to 37 weeks pregnancy
- Cessation of fetal movement

You must know when to refer to an obstetrician or midwife for assessment and appropriate medical intervention. The herbalist is not a substitute for a midwife or other childbirth professional. Unless well versed in both the natural and pathologic processes of pregnancy, as well as the ability to accurately and effectively assess conditions that arise during the childbearing cycle, it is best to work directly in conjunction with a midwife or sympathetic obstetrician or family practitioner.

As an herbal educator you have an amazing opportunity to work with women as they nourish new life, and grow into a new stage in their own lives. These changes bring a variety of physical and emotional challenges to women, some of which may be eased with the appropriate use of herbal medicines. The uniquely sensitive state of the developing baby and the mother's role in the health of the child requires specialized knowledge and a great deal of respect when using herbs for nourishment and treatment.

The textbook chapter corresponding with this lesson offers a deep dive into the safety of herbs in the childbearing year while subsequent lessons in this unit address specific pregnancy concerns and the role of herbs in their treatment.

HERBAL MEDICINE FOR WOMEN

Unit 3 Lesson 28

Fertility Problems

Learning Objectives

At the end of this lesson students should be able to:

1. Understand the definition of infertility
2. List the common etiologies and risk factors for fertility problems
3. Recognize the psychological and emotional impact of fertility problems on the woman and the couple
4. List and describe the characteristics of the most common botanical treatments for fertility problems
5. Create sample botanical protocol for various types of fertility problems

Required Reading/Listening

Botanical Medicine for Women's Health, 2nd edition (Romm)

- Fertility Challenges, pp 363-375

The Optimal Fertility Diet - https://avivaromm.com/the-optimal-fertility-diet/

Additional Recommended Reading

If you've not already read or listened: Menstrual Tracking: The Best "Me-Search" You Can Do at https://avivaromm.com/menstrual-cycle-tracking/

Ed Smith's accompanying article on Maca (Muira puama). Maca is a fertility-promoting root from the Andes that should not be overlooked for its nutritive, restorative, fertility enhancing benefits.

My book **Hormone Intelligence** offers a comprehensive plan to optimize fertility and conception.

Key Terms

Be sure to familiarize yourself with the definitions for all key terms. These can be found in the course resources or using an on-line medical dictionary.

Cervical mucus

Hyperprolactinemia

Hypothyroidism

Hysterosalpingogram

Infertility

PCOS (Polycystic Ovarian Syndrome)

Preconception care

Primary infertility

Secondary infertility

Spinnbarkheit

Sterility

Unit 3 Lesson 28 Fertility Problems

Key Botanicals for Fertility Problems

Students should be familiar with the botanical name, common name, actions, common uses, forms of use, general dosage ranges, side effects, and contraindications of the herbs in the following list. Ideally, you will also be familiar with taste. This information can generally be found in the course and accompanying required reading materials.

Actaea racemosa

Angelica sinensis

Asparagus racemosa

Chamaelerium luteum

Glycyrrhiza glabra

Muira puama

Paeonia lactiflora

Tribulus terrestris

Vitex agnus castus

Overview

Treatment for fertility problems has become increasingly common in recent decades – some of this is due to an increase in fertility challenges, especially delays in time to conception (when someone gets pregnant after starting to try). Some of this increase is due to a multibillion dollar annual fertility industry that takes advantage of women's anxieties about infertility and funnels them down the fertility treatment route fast and early – sometimes before criteria for an actual infertility diagnosis are met, and certainly before any practical nutritional and lifestyle approaches are tried. While, of course, we all know women/couples who are happily now parents, and respect all people's choice of fertility path they take, there's a great deal we can do to support couples, and particularly women, before they go down the slippery slope of fertility treatments which are invasive and costly, and many of these approaches also enhance the efficacy and outcomes of conventional fertility therapies.

In this lesson we'll explore the botanical approaches to supporting women on their fertility journey. While male factors contributing to fertility problems are presented, this lesson focuses on female factors in infertility.

A long-term plan of at least 6 and up to 12 months, with realistic goals and expectations, is optimal in fertility work – only rarely is a pregnancy achieved in one or two months when a couple has already been trying to get pregnant for years; numerous visits and extensive support and counseling may be required, and in some cases pregnancy may be achieved only to result in pregnancy loss, requiring additional support for renewed emotional and psychological (dis)stress resulting for the woman/couple.

The reasons for infertility are many and varied and the process of helping a woman/couple to achieve a pregnancy can be short and simple, but is more often long and complex

Underlying factors may lie with the woman, the man, or both, but regardless of the physical reasons, the deeper causes lie in the overwhelming number of root causes impacting modern fertility . Even if you specialize solely in women's herbal medicine, this may be one of the exceptions in your practice when you choose to consult with the male partner as well (though one can specialize solely in female fertility issues).

In addition to underlying physical causes of fertility problems, there may be psycho-emotional issues and relationship issues, either leading to or resulting from the difficulties associated with trying to conceive. Inability to conceive is often perceived as a personal failure, and can lead to depression and relationship stress. The process of undergoing medical fertility treatments can be frustrating, exhausting, expensive, and disappointing. It is a time of tremendous angst for most women and couples.

If couples have been trying to conceive for a long time, sex can become mechanical and part of your job will be helping them to revitalize the sex life, reintroducing passion and a joyful ambience for conception. Sex/relationship counseling can also be helpful.

There's a wealth of data that shows our diets can make a powerful contribution to getting (and staying) pregnant. And while there are many reasons for fertility challenges, including PCOS, endometriosis, anovulatory infertility, and other causes, nutritional support can have a profoundly positive impact on several root causes of fertility problems from nutritional deficiencies to inflammation to microbiome-related issues. In the accompanying required reading you'll find more on fertility and diet. Botanicals can also play an important supportive role.

Botanical Therapeutic Strategies

The herbalist's approach to fertility problems is a holistic one, taking into consideration the multifactorial complexity of fertility challenges. It is necessarily a body-mind venture. Herbs cannot address physical and mechanical obstacles interfering with fertility, for example, tubal scarring. However, botanical therapies can enrich the health of the woman (and her partner), enhancing the chances of a healthy conception, and can help restore hormonal balance and address many root causes and underlying conditions – like PCOS and endometriosis. Some of the stress associated with the emotional issues surrounding infertility can often be mitigated with supportive botanical therapies, and a healthy nervous system supported with the accompanying use of herbs, for example, the adaptogens. Infertility is not reduced to a reproductive problem; the whole woman and her whole life — nutrition, emotional context, environmental exposures, relationship, self-image, fundamental health — all of these are taken into account. In working with the woman with fertility problems, herbal strategies to consider include those that improve pelvic tone and circulation, those that restore hormonal balance, those that improve hepatic detoxification, reduce inflammation, nervines and adaptogens for nervous system support, nourishing herbs, and aphrodisiacs if needed.

Botanical Actions

- Adaptogens
- Anti-inflammatories
- Antimicrobials
- Antioxidants
- Aphrodisiacs (more on these in Unit 4)
- Immunotonics
- Nervines
- Hormonal support
- Reproductive tonics
- Hepatics

Unit 3 Lesson 28 Fertility Problems

Treatment for women/couples experiencing fertility problems can be thought of as having three stages: preconception care, fertility enhancement/conception, and post-conception care.

Preconception care lays the foundation for health in general – and this is what I always lay out for my couples as the ultimate goal: health. If there is health and conception is possible (i.e., no medical or mechanical reasons it can't occur) then it will happen. To become pregnant in a body that has been nourished and is in optimal health is a great gift for that child. This takes the process from infertility care to conscious conception care – reframing the experience and the intention.

Conscious conception is achieved through excellent nutrition, exercise, yoga, mindfulness, a healthy sexual experience, and mental and emotional preparation for pregnancy and parenthood. This includes wanting a baby for the sake of the baby, not for the sake of demonstrating fertility, succeeding as a woman or man, etc. – it takes the ego out and makes it about love. Herbs are used during this phase to address conditions that need to be healed, to restore balance either generally (i.e., with adaptogens) or specifically (i.e., if there is hormone imbalance for example, then herbs are used to rectify this).

This phase is one in which couples deliberately not try to conceive. Yes, that's right. It's ideally at least 6 months long, but 3 months is also great – and more realistic, especially for older couples trying to conceive who may feel they don't have half a year to wait before trying to conceive. That does not mean couples shouldn't have fertile sex during this time. They definitely can and should. But the deal is that it's specifically not with the intention to conceive, rather with the intention to connect and reignite passion. If conception occurs during this time, great, but this is not the focus. This allows the couple to take a mental and emotional break from the monthly cycles of sex for conception, anxiety, and disappointment. It's a built in hiatus from the stress and pressure trying (and "failing"). If needed, this would also be a good time for couples' therapy - for exploring what it means to be parents together and what it means for the relationship/marriage/future if they cannot get pregnant together.

Intentional conception comes next. The couple, now at the end of the preconception phase, commits to continuing to work on their general health and the health of their relationship (sexual and otherwise) while deliberately working toward conception. This is supported by herbs relevant to the physical and emotional features of each couple's individual health needs. This phase may last up to a year, and is punctuated by monthly visits to your office to discuss how things are going and to adjust herbal formulae and plans as necessary. Should conception occur at any time then this phase is complete and the post-conception phase begins. Should a prescribed amount of time pass without conception, how to proceed is discussed. The decision may be to continue longer with the herbal approach, to try a medical approach if this has not already been done, or to discuss alternative forms of achieving pregnancy (i.e., through ART) or adopting may be considered.

Post-conception care includes healthy pregnancy support, emotional support if miscarriage has been part of the history, and miscarriage prevention if needed. This phase usually lasts for the first trimester of pregnancy, at which time the couple may be considered to have "graduated" from the fertility plan and into midwife or OB care. Given that there's sometimes increased anxiety for women who become pregnant after fertility challenges, perinatal mental health support may be especially important.

Additional Support

Nutritional support, emotional support and counseling, deep introspection about relationship and childbearing, and physical movement are all essential components of health and should be included in the herbal plan toward optimal wellness and fertility enhancement. See Botanical Medicine for Women's Health for nutrition for promoting fertility. Acupuncture has been emerging as a leading effective CAM treatment for fertility problems and is an option you may want to recommend to your clients.

Risks/Cautions

There are few risks associated with the herbs used for fertility treatments. Things to keep in mind include:

- Will herbal therapies interfere with conventional medications? As there is no research in the area of herbs and fertility drug interactions, one must use common sense and extrapolate based on what is currently For example, it is probably best to avoid herbs that might affect hepatic hormone metabolism, for example St. John's wort, while using hormonal therapies
- Any herbs used during the preconception period should be discontinued once pregnancy is even suspected to have been achieved unless those herbs are known to be safe for use during the first trimester.
- It is important not to overlook underlying medical conditions that can lead to fertility problems; therefore a gynecologic and general medical evaluation prior to beginning fertility counseling is advised. Problems such as PCOS, thyroid, or other endocrine disorders can have far-reaching health consequences for a women if left untreated.
- Having realistic expectations is essential. See Clinical Pearls below.

Clinical Pearls

1: Know When to Say No

A 48-year old woman once came to me requesting help achieving pregnancy. I agreed to meet with her as she was insistent, though had not had a period in over a year. She'd been a virgin until age 40 and was now happily married in a healthy sexual relationship and she and her partner wanted to share in the joy of conception, pregnancy, and parenting together. When we met, I reviewed her lab work and found her FSH and LH to be elevated to menopausal levels. She was in menopause.

I explained to her that she would be welcome to try an herbal formula to see if she could nudge her ovaries to ovulate, but that once the ovarian function declined to that point the chances of conception were slim. It was very hard to convey this information, as on some level I didn't want to "psych" her out, and of course, many things are possible, but I also had to be honest and realistic. She did try herbs for a few months, but her fertility was not restored.

My dear friend, the late herbalist and midwife Jeannine Parvati, was a firm believer in the powers of the mind and body, and the connection between belief and physical manifestation, so she would pretty much say yes to anything someone believed could happen. She conveyed a story to me about how one even needs to suspend this belief sometimes when faced with practical realities. She learned this lesson in a very awkward way with this one particular client. A woman in her early 40s wanted to become pregnant. Jeannine did a health history interview – with Jeannine this was what she called an "innerview" (a term stemming from Jungian psychology) – many questions about beliefs, introspection, etc.. About an hour into the session Jeannine asked the woman if she had any further questions. The woman then asked if Jeannine believed it was possible for her to conceive even though she'd had a hysterectomy a few years prior! Jeannine was astonished. She assumed that if someone was coming for a fertility appointment, they surely had a uterus! Well, it takes all kinds of folks to make the world (some more nutty than others), not everything is possible, and it's important not to make assumptions about anything when you are working with real live human beings!

2: The Fertility Altar

Women across all cultures and across all times have honored fertility goddesses and made supplications to them for rain, abundant crops, and blessed wombs. While this might not be for everyone, the actual ritual of creating a fertility altar – a place in the home dedicated to objects, reminders, and prayers or positive thoughts for conception – can be a centering act that marks the beginning of a renewed effort toward conception. A daily visit to the altar can reaffirm the effort. Also, the altar can become a living focus of intention. A plant placed on the altar can be both a symbol of life and growth, and a reminder of the work and intention needed to start, grow, and maintain life. The altar can be transformed into a pregnancy altar if conception is achieved, and if not, it can still remain a symbol of hope, life, and self-care.

3: Sexual Energy

Trying to conceive can make sex a chore rather than a passionate, pleasure filled, erotic experience. While checking temperature for ovulation can help a woman identify her fertile time, the "We have to have sex now" mentality (unless coming from a totally horny place) is not conducive to hot fertile sex. Yet the hot energy is exactly what gets those juices flowing and may help the couple conceive. And even if they don't, they've kept their sex life intact instead of making it a battle between them and nature or each other. So to couples checking temps all the time and having sex according to a rigid schedule, I say toss the thermometer and have some fun with sexy massage oils, erotic positions, and sweet talk…

4: The "Fertility Package"

Because of the potential long-term nature of the consulting relationship with women/ couples experiencing conception problems, it can be useful to come up with a "fertility package" that includes a pricing structure for long-term consulting, a visit structure, a certain number of phone calls, a nutrition counseling session, etc. It can be a flexible plan covering all services for one year, for example, and if services are required beyond that time, the package can be extended. Having such a package can help you to avoid awkwardness if many visits are

needed, lets the client know you have thought seriously about what goes into fertility work, and also gives the client a sense that this is potentially a long process, not a quick fix. It also allows you to build several months of preconception care into the package, letting clients know that this is a part of the program, not just a mechanical effort to achieve a pregnancy.What dietary recommendations do you want to make, if any?

Case Review

Identification/Chief concern: Infertility

History: Andie and Max have been trying to conceive for about ten months. Andie is 35 and Max is 34. They have heard so many stories of "older" couples with fertility problems that they were getting worried that maybe something is wrong with them. A friend of theirs who worked with you and found you very helpful referred them to you.

Past medical history: No major medical illnesses or surgeries.

Family history: Non-contributory

Social history: They have been together for 8 years and were trying to get through graduate school before having a baby. Andie has just taken a job as a social worker in a firm serving several low-income neighborhoods and has job flexibility. Max has just taken a fellowship in cardiology and is quite stressed for time and worried about how a baby is going to fit into their lives while he is in this intensive training. They have a close knit circle of friends from college who live in the area, are not under any financial stress, and love the neighborhood in which they live. They plan to stay in the home they bought two years ago and raise children in it. Their hobbies include hiking, organic gardening, and music — he plays the bass and she plays the keyboard.

Gynecologic history: Andie experienced sexual trauma (abuse by her uncle when she was 12). Menarche age 13. Has irregular periods every 24-34 days lasting 2-4 days. Mostly light menstrual flow. No PMS or other period-related symptoms. No pelvic pain. No history of STIs, endometriosis, fibroids, or cervical procedures.

Mental health history: Depression as a teenager after sexual trauma. Her mother is a social worker and was very supportive and brought Andie to a very helpful and compassionate therapist. Andie also saw a psychologist in her early 20s when she became sexually active for issues about the sexual abuse that resurfaced for her. She has never been hospitalized nor taken medications for depression.

Review of systems: Otherwise normal.

Physical Exam: Routine general physical exam by her primary care doctor one month prior to her visit with you showed Andie to be in good health.

Gyn: Her gynecologic exam was also found to be normal at that visit.

Labs/Data: No labs have been done other than routine blood work which was all normal.

Unit 3 Lesson 28 Fertility Problems

Discussion

Andie is a generally healthy 35-year old woman with minimal life stressors, a comfortable lifestyle, and upon self-reporting, a happy and stable relationship. She and her partner have been trying to conceive for 10 months without success, having unprotected sex regularly throughout the month. They are concerned that something is wrong.

What do you want to tell them?

STOP HERE AND TRY TO FORMULATE YOUR OWN LIST BEFORE READING ON!

RESPONSE: Andie and Max are a healthy couple, still relatively young, and have only been trying to conceive for 10 months. Is there a problem? Not likely — most couples will conceive within a year, but of those who do not, most will conceive by the end of the following year. Do they need to do anything at this point? Well, Andie does have irregular and very light periods — she could be anovulatory, so there are a few things you might want to try (you will be asked what these are in the assignments section). What if another several months go by and Andie does not conceive — what would be recommended at that point?

What do you need to know?

STOP HERE AND TRY TO FORMULATE YOUR OWN LIST BEFORE READING ON!

RESPONSE: Questions to Ask

1. For how long have you been trying to get pregnant?
2. Have you ever been pregnant before? If yes, what was the outcome of that pregnancy (or those pregnancies)?
3. Have you ever achieved a pregnancy aside from with your current partner? Has your partner ever achieved a pregnancy with a different partner?
4. Have you ever been diagnosed with a coagulability problem, an autoimmune disorder, or any other disorder that can cause infertility?
5. Do you have PCOS? endometriosis? Uterine fibroids?
6. Do you experience pelvic pain?
7. What is the length, frequency, and regularity of your menstrual cycle?
8. Do you currently or have you had/been diagnosed with an eating disorder in the past?

9. Have you ever had a sexually transmitted infection or pelvic infection? If yes, please describe the condition, treatment, complications, etc.
10. Have you ever had an abnormal Pap smear? A cone biopsy? LEEP? Other cervical procedure?
11. Did your mother take DES when she was pregnant with you? (for women born prior to 1972)
12. Have you ever had a pregnancy termination or miscarriage? If yes, how many times? What was the treatment, if any. Any complications?
13. Have you and your partner been tested for fertility problems? If yes, what were the results?
14. Have you had any medical treatment for fertility problems? If yes, what and with what results?
15. Have you tried any alternative therapies for fertility problems? If yes, what and with what results?

What dietary recommendations do you want to make, if any?

STOP HERE AND TRY TO FORMULATE YOUR OWN LIST BEFORE READING ON!

RESPONSE: This is a really great time to do some preconception counseling about achieving an optimal diet that will lay the healthiest possible foundation should Andie become pregnant. One of the more common reasons for short menstrual cycles is low estrogen, so making sure Andie isn't overexercising or underweight is important. Her BMI is 22; she is physically fit and active, and does not indicate either a history of an eating disorder, nor over-exercising. You have ruled out a thyroid disorder and other medical conditions based on a review of recent labs.

She does have a somewhat restrictive diet, so you suggest increasing her overall intake of healthy carbohydrates and healthy fats. You refer her to Dr. Aviva's The Optimal Fertility Diet podcast and article.

What lifestyle recommendations do you want to make?

STOP HERE AND TRY TO FORMULATE YOUR OWN LIST BEFORE READING ON!

RESPONSE: First off, both partners should be on a multivitamin – a prenatal with methylfolate for Andie). Max is feeling stressed about having a baby while he is in fellowship. This is an important discussion for Max and Andie to have, so that both feel happy and supported going into a pregnancy. Can Andie call on extra support from friends and family? Will Max be able to carve some "downtime" into his schedule? Will he be able to take a paternity leave? What will help him to feel more relaxed about the timing? Will Andie leave her job to care for the baby? Can they afford this? Or what other plans do they have? Is there a way you can support Max herbally, do they need a referral for supportive couple's counseling?

Unit 3 Lesson 28 Fertility Problems

What will your main botanical focus be with Andie?

STOP HERE AND TRY TO FORMULATE YOUR OWN LIST BEFORE READING ON!

RESPONSE: Your initial focus will be on helping Andie to regulate her menstrual cycle.

What botanical protocol do you want to provide, if any?

STOP HERE AND TRY TO FORMULATE YOUR OWN LIST BEFORE READING ON!

RESPONSE: Vitex daily is a simple option for regulating Andie's cycles, able to increase both estrogen and progesterone when taken over several months. You can get more complex than that, of course, but often simple is elegant. I'd also consider a nervine or adaptogen/nervine blend to support her emotionally during this time. Some favorites to consider include Ashwagandha, reishi, holy basil, milky oats, and motherwort. Discontinue when she suspects she's conceived.

When do you want to see Andie again and what can she expect?

STOP HERE AND TRY TO FORMULATE YOUR OWN LIST BEFORE READING ON!

RESPONSE: It would great to see Andie again in 8 weeks to check in on her cycles, any changes she's experienced in the past 2 cycles, and how she's managing sticking with her protocol, and then follow up with her monthly after that until she conceives – and set reasonable expectations for time to conception, which if not achieved in that timeframe, you refer for care.

(In real life, "Andie and Max" conceived in 7 months; it took 3 months for Andie to ovulate regularly and achieve a 26-28 day cycle) – but in the Cases, Reflections, and Formulations….let's see what happens if things are more challenging in a fertility case).

HERBAL MEDICINE FOR WOMEN

Unit 3 Lesson 29

Pregnancy Wellness

Learning Objectives

By the end of this lesson you will be able to:

1. Recognize the historical, social, and cultural factors that influence how women in the US today experience pregnancy and childbirth
2. Understand the historic contexts from which modern obstetrics and midwifery arose
3. List the major nutrients needed by pregnant women
4. Discuss the importance of exercise and posture in pregnancy
5. List additional self-care techniques that women can use to improve pregnancy wellness

Unit 3 Lesson 29 Pregnancy Wellness

Required Reading

- *Botanical Medicine for Women's Health, 2nd edition(Romm)* Pregnancy Care and Prenatal Wellness, pp 376-377 (read just up to miscarriage section)
- *Maternal Nutrition: As Upstream as Health (Care) Gets - webinar*
- Prenatal Vitamins: Do You Need One and How to Choose https://avivaromm.com/prenatal-vitamins/
- Protecting Your Baby's Health Even Before Birth https://avivaromm.com/protect-your-babys-health-even-before-birth-5-important-tips-from-a-midwife-md/
- MTHFR: What the Bleep is It?: https://avivaromm.com/mthfr-what-the-bleep/

The state of a woman's health is indeed completely tied up with the culture in which she lives and her position in it, as well as in the way she lives her life as an individual. We cannot hope to reclaim our bodily wisdom and inherent ability to create health without first understanding the influence of our society on how we think and care for our bodies.

Christiane Northrup, 1994

Introduction

This course is predicated on the belief that women's bodies work. But numerous 21st century factors – from sedentary living to the Standard American Diet to trauma history can get in the way. Additionally, numerous social and cultural beliefs about birth have the potential to interfere with women's "innate body knowledge," and for so many women, this is, in fact, exactly what is happening. Exacerbated by an obstetric profession that sees the pregnant woman as a medical disaster waiting to happen, childbirth is pathologized and we find ourselves with a nearly 40% caesarean section rate.

Herbalists who serve as guardians of belief in the innate power of women's bodies can serve as important guides for women as they enter childbearing, reminding women that birth is a physiological process of which we are usually capable with minimal interference. A pregnant woman can't have too many people giving her this good news!

An herbalist can also serve as a strong source of support and encouragement and a valuable resource for women when things don't go exactly according to hopes and plans, reminding women that they are still strong and capable beings. The impact of close female relationships, prenatal support and guidance, and sound physiological approaches such as attention to nutrition, exercise, and an understanding of body-centered, intuitive awareness can be profound for improving pregnancy health, birth outcome, and even postpartum recovery and integration of the newborn into the woman's life and the family.

Clearly a single lesson – or even a whole unit – cannot provide enough information to prepare students for all of the nuances and complexities of caring for pregnant women. The comprehensive care of pregnant women could reasonably be an herbal subspecialty in itself, and consultation would still need to occur in conjunction with a midwife or other obstetric care provider.

This lesson provides an overview to the care of pregnant women. Subsequent lessons provide information on specific conditions – both common concerns and medical challenges – that might arise. It is advisable that herbal educators, unless also trained in midwifery, obstetrics, or family medicine, only provide direct consultation for the treatment of common, simple concerns and leave the treatment of medical problems to the care of those trained to provide such services, and serve as an herbal consultant to midwives and OBs in such cases.

This lesson briefly explores some of the historical influences that have contributed to the prevailing view of "pregnancy as disease" in our culture, and presents general suggestions for how we can nurture positive, healthy self-concepts for our pregnant clients. The lesson does not provide comprehensive coverage of pregnancy care, but briefly discusses the basic health needs and care of pregnant women.

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Key Terms

Be sure to familiarize yourself with the definitions for all key terms. These can be found in the course resources or using an on-line medical dictionary.

Folic acid

Hematocrit

Hemoglobin

Methylfolate

A Short History of Childbearing in the US

In order to understand the cultural context in which women today are pregnant and give birth, it is important to understand a little bit about the history of birth, midwifery, and obstetrics. Each of us is a recipient of the social, political, and economic forces that have shaped our current childbirth context. It is these forces, and the degree to which women have internalized them, that have influenced, more than any other factors, the pregnancy and birth experience for women. I heartily encourage those interested in this topic to use the recommended reading list in The Natural Pregnancy Book as a resource.

Me midwifing back in the day! (newborn exam with the baby's older siblings from a blended marriage)

Approximately 4 million women give birth in the US annually. In the United States, midwives care for only a small percentage of women during pregnancy and childbirth, family physicians for 6 to 7 percent of women, and obstetrician-gynecologists provide the bulk of maternity care. Less than 2 percent of births in the US occur at home (this has increased slightly during the COVID pandemic) In contrast, in many countries around the world, including modern

industrial countries, many babies are born at home, and most births occur with a midwife in attendance. In the United States up until the early part of the twentieth century, homebirth was the norm. The process by which birth became a medicalized event took place over approximately three centuries, with the roots of change going back even further.

As early as the thirteenth century in Europe a devaluing of nature and the feminine began to occur with an emphasis placed on the dominion over nature and women by both religion and science, domains occupied almost entirely by upper-class (white) men. Prior to this it was believed that nature provided the sustenance required for life and that nature, perceived as a feminine force of creativity, was sacred. The reproductive capabilities of women were considered acts of power and were accorded great respect while pregnant women were considered numinous. The primary care providers for women were women. Three hundred years of witch hunts drove midwives underground for fear of their own lives and the lives of all the women with whom they came in contact – even their neighbors, sisters, and daughters who might have been killed by association with a witch (midwife, herbalist, wise woman).

By the 18th century in Europe wealthy women were assisted at birth primarily by doctors, whose training was usually of short duration and of dubious quality. Many of the earliest recognized doctors were barber-surgeons – that is, they were literally barbers who doubled as surgeons (hence the red "ribbon" in the traditional "barber pole"). University trained physicians were not much more qualified, relying on harmful preparations containing toxic substances, prescribing dangerously large doses of laxatives and cathartics, and relying heavily on bleeding their patients. In obstetrics, the use of forceps caused severe, debilitating, and deadly consequences such as lifelong urinary and fecal incontinence from recto-vaginal fistulas. Infection spread by the hands of the surgeons and doctors killed off numerous mothers from childbed fever.

By the mid-nineteenth century in Europe the midwife had regained a place within the care system for pregnant and birthing women. This occurred in part because many women, particularly in the countryside, continued to employ midwives. With greater literacy skills and access to both reading and creating medical literature, midwives began forming organizations for mutual support and education; they often joined together to demand rights and privileges for the practice of midwifery. However, as midwives achieved greater social acceptance, they were also required to practice under the control of government-based regulatory boards and to get their training from specified institutions, rather than from other women, as had previously been the case. Their presence had never been completely eliminated, and their new role was likely tolerated due to the sheer necessity of having enough practitioners to meet the needs of childbearing women for birth attendants.

The midwife was an important figure in colonial America. There were few European trained physicians on the continent, and no medical profession had yet been formally established here. It was therefore natural for women to turn to each other in birth, though many frontier women also birthed alone. The midwife remained the primary care provider for childbearing women throughout most of the 1800s, and even into the early 1900s; immigrant women coming to America continued to rely on midwives from their own communities when it came to giving birth. In the Southeastern United States, black midwives provided the preponderance of care for women – white and black – until systematic eradication of the midwife began by the medical profession, threatened by the presence of these midwives who were preferred by the women they served.

By the early twentieth century the midwife's role had been almost wholly usurped by medical doctors, with final control being assumed by obstetricians. Statistical evidence from the early 20th century demonstrates a remarkable disparity between birth outcomes of births attended by midwives versus physicians, with the former

ubiquitously having lower maternal and infant morbidity and mortality. However, the rise of modern obstetric practice, the advent of the hospital birth, and antibiotics led to the eventual demise of the community midwife as the main care provider for birthing women. This change was not forced upon pregnant and birthing women; however, fear tactics about birth and propaganda against midwives were used to convey the idea that doctors and hospitals were more desirable than midwives and homebirths. The fact that entering the hospital provided women a respite from the demands of home life was also a factor that enticed women to have their babies in the hospital. By the 1920s many immigrant women aspired to be like wealthier American women and, in an effort to dissociate themselves from their backgrounds, chose hospitals and doctors over immigrant midwives.

Likewise, the fact that so many midwives were immigrants, and in the South were black women, made them prime targets for bigotry, racism, and systematic discrediting. The fact that women were significantly less likely to develop puerperal sepsis (childbed fever) after a homebirth with a midwife than after either a home or hospital birth with a doctor became a moot point after the development of antibiotics in the 1940s, which in the minds of most, satisfactorily addressed the issue of infection from pathogenic agents. Early physician care in the Unites States during the late nineteenth and early twentieth centuries is attributed with causing epidemic deaths from childbed fever, spread from lack of hygienic care of doctors who went from tending the sick and dying, to attending women in labor.

For quite some time in the early part of the twentieth century there was also a movement led by women called the Twilight Sleep Movement, in which women demanded the right to general anesthesia for the birth experience. Having lost the connection to female support traditionally available to them from midwives and other female birth attendants that enabled them to cope with the birth experience consciously, women now desired to disconnect completely from the birth experience. Though there were problems with the medication used to promote twilight sleep, it was not until the chief proponent of the movement died as a result of the anesthetic, a combination of scopolamine and morphine, that the movement disbanded. This drug combination was also discovered to harm the baby.

Throughout the first half of this century, until the early 1960s, American women experienced pregnancy as somewhat of an embarrassment – public evidence of their sexuality in a culture that kept sex a secret. The cultural role model for women was the pretty, wholesome, dutiful, and subservient housewife and the independent woman a rare exception. Not surprisingly, women were patronized in the area of childbearing during this period. Obstetrics was still an emerging field in which prenatal care was not a developed aspect. Even in the 1960s, for example, x-ray technology was considered a safe diagnostic tool for measuring the pelvis to see if the baby could fit through it. "Old wives' ways" were thoroughly discounted, and some of the advice that survived was not always reasonable, such as the notion that a pregnant woman putting her arms over her head could cause her baby to become strangled by its umbilical cord.

By the late 1960s and early 1970s, many women were beginning to rebel against the limiting roles for women in society, demanding equality in many areas, including economics, marriage, and health care. At the same time, obstetric science made many advances in knowledge, but it also began to rely more heavily on technological interventions than ever. A few models of childbirth education, such as the Dick-Read method, the Leboyer method, and Lamaze did begin to emerge, offering a slightly more enlightened perspective on pregnancy and birth attitudes and practices than the dominant ideas and practices. These methods emphasized a return to a more natural approach to birth, greater education and preparation for birth during the pregnancy,

more conscious involvement on the part of the mother, and greater consideration toward the sensitivities of the baby. These were important advances for women to make in their approach to birth; with these methods behind them, women began to demand that their husbands participate more in the pregnancy and birth and that they attend childbirth education classes and be allowed to be present at the birth. While not all men were eager to be present at the birth, as the idea became more accepted, more men began to participate; now men are practically expected to support their partners as they give birth. Yet there were shadow sides to some of the methods of birth preparation. Even within these new birth approaches women were still cast into stereotypical roles, women's empowerment not being an important goal in childbirth preparation. Compliant, easy patients were still, for the most part, the goal.

In spite of their small gains, women were still, well into the 1970s and even 1980s, predominantly uninformed about the actual process of pregnancy, and uninvolved in their prenatal care. A common attitude of obstetricians was "Don't you worry your pretty little head about a thing." As women were absolved of the responsibility of birthing, they were also not expected to participate in decision-making. They were still patronized, frequently drugged, strapped down for birth, and subject to isolating and inconsiderate treatment, such as frequent vaginal exams done by a variety of doctors and medical students, most of them male. Babies were still being held upside down and slapped on the behind after the birth and were whisked away immediately. Few women breastfed, giving their babies formula by bottle, instead. Though there were small gains in equal rights in the public sphere, and even in the home, women were still not the central decision makers, if at all, in their prenatal or childbearing experiences. Incidentally, as of 1969, less than 9 percent of all physicians were female, and not many of these were practicing obstetrics. Now approximately one-third of all medical students are women, many of whom enter obstetrics and gynecology, certainly an improvement, but still not the high percentages that we should see. Additionally, the process of medical school is so enculturating that many female OB/GYNs have similar values regarding pregnant and birthing women as those that are held by most male physicians. Some have even remarked that women ob-gyns are more "anti-woman" than their male colleagues, having had to overcompensate for their femaleness in a male dominated medical environment, causing them to denounce their own identifies.

During the 1970s technology became a more prevalent aspect of obstetrical care. As technology seemingly began to take on a life of its own, any last connections that obstetrics had maintained with natural processes began to dissolve, leaving testing, monitoring, and pre-set protocol based on statistical curves as the determining factors of the care women should receive. Thoroughly indoctrinated during pregnancy (and for most of their pre-pregnant lives) into a technological medical system, and motivated by the desire for a healthy baby, women did not, as a whole, question the growing number of intrusions during pregnancy or birth, nor the safety of these interventions. While many doctors had a very strong desire to help their patients, and a strong belief in the value and importance of such testing, the overuse of technology in prenatal care reflected a huge, misguided "faith" in technology over the human body and the magnificence of pregnancy and birth. Additionally, due to legal concerns and economic motivations on the part of many doctors, medical institutions, medical supply and insurance companies, prenatal and intrapartum testing began to be requisite for all pregnant women, rather than optional for those women who seemed to be at higher risk for problems and would therefore likely benefit from tests and invasive procedures.

In the mid-1970s a small but determined number of women had begun questioning whether they were satisfied with their pregnancy and birth experiences and the type of treatment they were receiving from the medical profession. Coincident with the rise of the women's self-help movement and the so-called back-to-the-land

movement, women began to return to a more traditional and natural approach to pregnancy and birth, relying more on trust in natural cycles for reassurance of their wellness than on medical advice and testing. These pioneering women found reassurance and inspiration in women living in societies not of European origin who have historically seemed to fare much better in childbearing than westernized women. A resurgence began in midwifery care, homebirth, and the use of practical self-care practices such as excellent nutrition, exercise, and the use of natural remedies such as herbs. Some of the earliest pioneers of this movement include Shelia Kitzinger, Jeannine Parvati Baker, Shafia Monroe, Ayanna Ade, Elizabeth Davis, Ina May Gaskin, Rahima Baldwin, and countless other women whose persistent and courageous efforts have kept natural birth options existent for all of us.

With the growth of the alternative childbirth movement, midwives and mothers had available to them the best of both the natural traditions and the advances of obstetric knowledge on which to draw. In fact, many midwives were women who were seeking to provide other women with the type of care that they wished they had received during pregnancy. Women began to teach childbirth education classes and some of them, such as sociologist and anthropologist Sheila Kitzinger and midwife and educator Rahima Baldwin, founded international organizations to inform and empower pregnant women. A rare handful of supportive physicians also provided assistance for those desiring a more natural approach to pregnancy and birth.

By the 1980s the alternative childbearing movement had gained momentum, and though only 1 percent of all women were having homebirths, midwifery was no longer a thing of the past. With the resurgence of midwifery also came a resurgence of the prejudice against women healers, and the attendant persecution of midwives. In many areas of the United States traditional midwives have been arrested, harassed, faced with restraint of trade, and have endured emotional and economic hardships as a result of court cases and legal fees. Of course, the families of these practitioners suffer greatly as well. Even certified nurse-midwives, fully trained and sanctioned by the medical establishment, face limitations in their practices and are forced to practice strictly under the auspices of an obstetrician. It is determined by individual obstetricians, as well as the regulating organization of nurse-midwives, just how much autonomy each individual midwife will be allowed.

Midwives are committed to the care of pregnant women and are working to create a political environment in which all women have the option of receiving the kind of care and support midwives offer – care that is nurturing, warm, and designed to meet the needs of individual women, as well as professional, competent, and affordable.

The alternative childbirth movement has had a significant impact on women's experiences of childbirth, even for those choosing to give birth conventionally and in the hospital. Practices such as rooming-in, the allowed presence of fathers, friends, and even children at births, and the development of birthing suites and birthing centers are all testimony to the efforts of the alternative childbirth movement. The growing popularity of good nutrition during pregnancy with natural, organic foods, the use of exercise and yoga for prenatal relaxation and toning, and attention to holistic and spiritual health, including the use of herbs, massage, and meditation also reflect the influence of the alternative birth movement on mainstream pregnancy and birthing practices.

Some things have improved. More women in the US are breastfeeding again – and for longer – than in the past 50 years. Homebirth is a household idea. Currently, women who birth at home, most of whom receive highly individualized prenatal care from midwives, have a lower incidence of maternal morbidity and mortality and experience fewer interventions in the process.) But there is much work still to do to make change in childbirth –

especially when we consider the fact that the US continues to rank among the lowest in maternal and neonatal health outcomes in the Western world, as many as 7-14% of women in the US report experiencing obstetric trauma, and the fact that black mothers and babies are significantly more likely to experience adverse outcomes in the content of obstetric care in the US.

Physical and Emotional Changes During Pregnancy: What's Normal?

Pregnancy is a time of tremendous transformation for a woman who experiences not only the obvious physical growth, but also unseen physical sensations and emotional and mental stretches as she assumes the personal and social role of being a mother. This is as true for women having their first babies as it is for those having subsequent pregnancies, as each pregnancy and child causes us to adjust our self-concept. While every woman has a unique physical experience of pregnancy, there are certain physiological changes that are relatively universal. The degree to which these changes become discomforts varies, influenced by nutrition and dietary habits, exercise, heredity, available support and sense of security, and personal attitudes or outlook.

Knowing which changes are a normal part of pregnancy can help you to explain these to your clients and can also inform you as to what you can try to support with botanicals and what might need medical attention.

Breasts

- Breast sensitivity and even extreme tingling or tenderness are common
- Breast size is increased (may increase substantially)
- The nipple and areola darken
- Small, raised bumps appear around the areola called Montgomery's tubercles; they are oil-secreting glands that keep the nipple lubricated
- A yellowish or cream-colored discharge may be extracted or leak from the nipples – this is colostrum, the first "milk" that is in the breasts
- The breasts may feel more nodular, that is slightly lumpy, due to enlargement of the alveoli, the milk glands. (However, breast cancer can occur in pregnancy so suspicious lumps should be evaluated by a medical professional.)

The Yoni (Vulva/vagina)

Yoni is a Sanskrit word that means "womb, vulva, vagina, place of birth, source, origin." The yoni is also considered to be symbolic of Shakti or Devi in Hindu Tantra. In classical texts such as Kama Sutra, yoni refers to the vulva. It is used to connote the sacredness of the female reproductive organs and the power of the feminine. It is used as an alternative to the word vagina, which means "a sheath."

- The birth canal becomes a purplish color (seen with a speculum early in pregnancy) and the cervix becomes soft – changes your midwife or obstetrician might notice
- There is an increase in amount of vaginal discharge (sometimes significant even requiring a panty change)
- The vulva becomes quite engorged during pregnancy due to increased blood flow to the area; this can greatly increase sexual sensitivity and pleasure
- The cervix gets more engorged becoming softer and more friable (meaning that it is likely to bleed if it is scraped or touched); pregnant women may notice a few spots of blood, or pink tinged vaginal mucus after sex

Digestive Changes

- There is increased sensitivity to smell with a concurrent change in tastes
- Digestion is slower
- Nausea and indigestion are common and may last anywhere from the first trimester through the whole pregnancy.
- Appetite may ebb and flow
- Heartburn is common
- Constipation is common

Circulation

- Increased sponginess of the gums can cause them to bleed more easily
- Varicosities and hemorrhoids may appear especially in late pregnancy

Urinary Changes

- There is a marked increase in the need to urinate, as frequently as every couple of hours during the first trimester and even more during the last months of pregnancy, with increased peeing also occurring at night.
- Pressure of the uterus on the bladder may cause occasional dribbling of a bit of urine with sneezing, running, or jumping. This is also due to weakness of the pelvic floor muscles, so teach pregnant women to strengthen the pelvic muscles to prevent later problems of incontinence.

Uterus and Belly

- The uterus grows from its pre-pregnant size of smaller than a pear to its size near term of a rather large

watermelon (the uterus increases in weight from a couple of ounces to about two pounds).

- The top of the uterus, called the fundus, can usually be felt at about the level of the navel at 20 weeks gestation.
- At approximately thirty-six weeks the fundus will be pushing up against the diaphragm causing the pregnant mom to need to eat smaller meals and may cause heartburn or even a feeling of not being able to fill the lungs as deeply or causing shortness of breath with climbing stairs, etc.
- Periodic and irregular tightening or contractions of the uterus called Braxton-Hicks, contractions occur more frequently as pregnancy progresses.

Skin and Hair

- Enhanced hair and nail growth are among the great advantages of pregnancy hormones; unfortunately this bonus usually stops after the birth, and in fact much of the new growth may fall out during the first year after birth.
- Skin pigmentation changes occur (i.e., the darkening of the nipples, the development of the "linea nigra," the line of pregnancy that extends over the abdomen, and the "mask of pregnancy" which can be a sign of folic acid deficiency or simply a normal physiological pregnancy change).
- There may be an increase or decrease of pre-existing skin troubles such as acne or eczema.
- Itching may occur, particularly as pregnancy becomes advanced – usually due to stretching but if not relieved by normal comfort measures, get a medical opinion because it could be a sign of a liver condition.
- Stretch marks may initially appear as reddish or purplish streaks on the lower belly (and sometimes the breasts) and later turn to silvery streaks.
- Increased sweating, and the sweat may have a stronger and more characteristic odor.

Bone and Muscle

- Contrary to popular assumptions, pregnant women do not suffer bone loss or tooth demineralization if they eat a well-balanced diet. In fact pregnancy enhances calcium uptake, and though some bone loss may occur during lactation, this is replaced when the child stops nursing.
- Due to the influence of hormones, women in late pregnancy will notice that their joints, especially in their pelvis, feel looser. It is this same loosening affect that leads pregnant women to "waddle" as they get to the end of the pregnancy, and which also allows to pelvic bones to separate slightly and accommodate the baby's head for birth.
- Pregnant women should pay attention to their posture, as the loosening of the joints and the slight relaxation of the abdominal muscles can lead women to sway their backs and then develop low-back pain.

Emotions and Psyche

• Pregnant women not only experience dramatic physical transformations, but also experience shifts emotionally and socially, as our perceptions of ourselves as mothers grow, and as our social roles and responsibilities change.

• Emotional and psychological change is a normal and healthy part of growth for the woman becoming a mother. Emotional sensitivity affords women the opportunity to reflect on fears, anxieties, concerns, and joys as well. While each woman will have her own unique set of issues to address, the "themes" which infuse the emotional and psychological issues are very similar from woman to woman, and are often reflective of the stage of pregnancy that the woman is in at the time. Some of these include fear of death of self, the child,or partner, issues about one's own mother, financial concerns, body images issues, and fear of birth and mothering. Processing all of these with an experienced midwife, an experienced friend who has had children, or other experienced wise woman is part of the inner work of pregnancy that should not be overlooked.

Who Takes Care of Childbearing Women?

It's my personal belief that women are the most appropriate care providers for other women. While there are sensitive male obstetricians and male midwives, women, especially those who have been through childbearing themselves, are going to be the most empathetic care providers. However, women who have gone through training as ob-gyns are likely to have internalized the same anti-physiologic birthing attitudes and expectations as their male counterparts, so the gender difference of the care provider becomes less important than finding someone with a positive attitude about birth.

Midwives

Various labels (and styles) include direct entry midwife, licensed midwife, certified professional midwife (CPM), registered midwife, lay midwife, traditional midwife, and spiritual midwife. CPMs, licensed, and certified midwives are the most likely groups to have received reliable, formal training, although this is not always the case and care is advised in selecting a care provider.

Advantages

- Midwives honor the central importance and participation of the pregnant woman in the entire childbearing experience.
- Midwives maintain respect and sensitivity for the needs of the baby.
- Midwives see pregnancy and birth as a natural process for which women are inherently and biologically capable.
- Midwives honor childbearing as a rite of passage.

- Midwives support the woman in her transition to motherhood, helping her to grow in her confidence and ability to nurture herself and her baby both before and after birth.
- Midwives mainly attend home births, but in some states may have birthing centers or clinics where they provide prenatal care and birthing services.

* Midwives are most likely to incorporate both conventional knowledge of skills and techniques with complementary healing modalities such as dietary awareness, herbalism, and massage.

Disadvantages

- Training and skill levels vary greatly from extensive apprenticeship and formal training programs to those who "feel a calling" and set up a practice, so care must be taken in selecting a care provider who is safe and knowledgeable.
- Political climates can be hostile to homebirth midwives affecting midwives decisions to interact with their local medical community; this can influence the decision to transport to the hospital if medical care is needed, leading in the worst cases to delays in needed transport when faced with complications to mother or baby, or abandonment of the mother by the midwife if the midwife refuses to go to the hospital with her; it can also lead to hostile attitudes and treatment of the mother should a need for interfacing with the medical community arise, especially when there is a complication.
- Most do not practice well-woman gynecology so only childbearing services are available and another care provider is required for care outside of pregnancy, birth, and the immediate postpartum.

Certified Nurse Midwives (CNM)

Advantages

- CNMs share many of the same values and philosophies of midwives described above.
- CNMs have consistent training: Nurse midwives have gone through training as a nurse before beginning their midwifery training, which they gain by attending academic classes as well as by gaining clinical experience in caring for childbearing women and performing well-woman gynecological care. It is focused and often very high quality training in the care of childbearing women as well as general well-woman gynecology.
- CNMs mostly practice in hospital and birthing centers; some have homebirth practices.
- CNMs are a great alternative to non-nurse midwives for women who are seeking woman-centered medical care.

Disadvantages

- Because of their medical background they might not feel as comfortable about birth in a non-medical setting (i.e., home).
- May not be aware of complementary therapies that can facilitate health during pregnancy and birth.
- Due to issues of malpractice insurance, are obligated to protocols of individual doctors and hospitals.
- Must rely on the approval of their overseeing obstetricians, and must therefore conform to medical standards.

Obstetricians

Advantages

- OB training is extensive and consistent amongst ob-gyns.
- OBs provide in-hospital care for women for women preferring this.
- OBs can provide necessary medical/surgical care in obstetric emergencies and high-risk pregnancies.
- A few courageous individuals, both men and women, do have homebirth practices or at least try very hard, often at the expense of professional comfort, to support women in birthing how they choose to do so.

Disadvantages

- Trained to manage pregnancy and birth as medical events, leaving very little room for the unique experiences of individual women.
- Few obstetricians are supportive of letting the mother be the orchestrator of her own health care, seeing pregnant women as potential emergencies.
- Pressure they feel to protect themselves from lawsuits; "defensive medicine" becomes the norm, and women the recipients of their anxieties.
- Few are supportive of homebirth.
- Reliance on technology.
- Little attention (if any) to preventative health care such as nutrition, exercise, or other useful techniques.

In addition to the above care providers, Family Physicians also receive minimal basic training in childbirth care and in many places deliver babies in the hospital. Some are even trained to assist in or perform cesarean sections. Family practice physicians are usually philosophically more aligned with a non-interventionist midwifery approach to childbirth than to the obstetric model.

Pregnancy Wellness

Key aspects of a healthy pregnancy, birth, and postpartum experience are:

- Avoiding pregnancy-harmful substances and habits (i.e., drugs, alcohol, etc.)
- Good nutrition
- Exercise, body awareness, and proper posture
- Positive social support
- Knowledge/education about pregnancy, birth, postpartum, breastfeeding and care of the newborn
- Having adequate prenatal care and a good guide through the childbearing process
- A realistic understanding of and expectations for the childbearing experience

Nutrition

This section only briefly discusses the large and important topic of nutrition during pregnancy. It's especially important for women to get adequate folic acid/methylfolate prior to and in early pregnancy to prevent neural tube defects, and essential fatty acids for baby's nervous system health. Every pregnant woman is going to have a unique appetite, particular likes and dislikes, comfort foods, and ethnic food preferences. A food journal is an indispensable tool in pregnancy, just as it is at other times, however what a pregnant woman needs and to eat is slightly different to accommodate her needs and the baby's. However, contrary to myth, pregnant women do not need to 'eat for two.' Here is a general guide to the number of servings a pregnant woman should get of major nutrients and food groups daily.

Food groups/Nutrient	Number of servings daily
Whole Grains and other Complex Carbohydrates	4-5
Protein	4
Good Quality Fats	2-3
Vitamin C foods	2
Calcium foods	4
Green Leafy Vegetables and Yellow Fruits and Vegetables	3
Other fruits and veggies	1-2
Iron rich foods	daily
Fluids	At least 8 glasses/day

Requirements increase in multiple (twins, etc.) pregnancies, for teens, and in other specific circumstances. Also, pregnant women's diets will vary just like everyone else's – we all have better days of eating, and skimpier days, depending on how we are feeling and what is going on in our lives. Pregnant women must just be mindful that they are feeding the baby and that the baby needs nourishment often and from high quality (ideally organic) sources.

Weight Gain

How much weight should a pregnant women gain? It depends on her starting weight. Here are the current guidelines:

If before pregnancy you were:	Then the recommended weight gain is:
• Underweight (BMI less than 18.5)	28-40 pounds
• Normal Weight (BMI 18.5-24.9)	25-35 pounds
• Overweight (BMI 25.0-29.9)	15-25 pounds
• Obese (BMI greater than or equal to 30.0)	11-20 pounds

It's important to recognize that BMI is not a perfect tool and has come into question based on ethnic differences in body type, racism, and weight shaming. But until we have a better proxy method, it remains an important general guideline. It's also incredibly important to keep in mind that not all weight gain is equal – a healthy diet is the key to healthy weight gain, and also key to preventing some of the most critical conditions that affect maternal and infant health, including gestational diabetes, maternal hypertension, preeclampsia, iron deficiency anemia, and hemorrhage.

Exercise: Moving the Pregnant Body with Joy

Exercise promotes healthy circulation, maintains a general feeling of well-being, prevents depression, reduces fatigue, prevents the build-up of tension in the muscles, reduces low backache and helps prevent varicosities, constipation, hypertension, and more. ,. Exercise helps get our bodies ready for the work of birth, and also aids recovery after birth. There are also many specific exercises and yoga postures, for example, that can be used to relieve many common pregnancy discomforts.

Encourage your clients to move, flow, and exercise during this time, without overdoing it, of course. Care should be taken to avoid falls as the center of balance changes with growing belly size, and to avoid straining muscles, for example, the rectus abdominals. Exercise should be appropriate to pregnancy and to a woman's skill and experience level with that exercise form.

Regular massage is another great body-centered activity for pregnant women. It is a form of passive exercise for the recipient, with many of the benefits of physical exercise, such as improved circulation and removal of waste products from the muscles. While the high cost for professional massage may be cost prohibitive, even as little as twenty minutes of massage on an occasional basis given by a partner or friend can be beneficial.

Learning to Listen to Your Body: Important for YOU and Your Clients

The medical profession, into the hands of which most of us were literally born, has conditioned us to rely on its experts for answers to the questions that we have about our bodies. It is a profession that subordinates subjective knowing and emphasizes that the ability to heal is not an innate human capacity, but a result of medical training and techniques. We are taught that normal processes such as birth, menstruation, menopause, and even death, are dangerous processes that require medical supervision and intervention. In our society it is not encouraged, or even acknowledged, that we have the ability to be healthy without constant medical assistance. We learn that fatigue, hunger, sadness, stress, headaches, menstrual cramps, and most other physical feelings that are uncomfortable or unpleasant can be suppressed.

We are not taught that these feelings are the language of our bodies, and that our bodies speak to us louder and louder until we are finally forced to listen. This happens when we ignore little messages until they turn into discomforts, then symptoms, and then outright diseases. But we can change this conditioning by listening to our bodies.

Pregnancy is a time when listening to body wisdom can be especially beneficial and can allow us to move through labor and birth with greater ease than intellectualizing the process. Pregnant women who can tune into what I refer to as "animal wisdom" may find that their bodies naturally move into positions that facilitate labor, for example.

Each of us receives messages daily from our body, informing us when, what, and how much to eat, when to sleep, when to exercise our muscles, when to have a bowel movement, etc. Your body is quick to detect when you are nourishing yourself and when you are harming yourself. This is true of not only foods and substances that you ingest, but also of situations into which you put yourself or find yourself in, and of the thoughts and feelings you have. You can feel these responses, if you pay attention, in your nerves and muscles. For example, you may find that areas of your body tense up in a stressful situation, or that you sneeze in a room where a cat has been recently, if you are allergic to cats.

The concept of being body-centered is not meant to imply separation of the body, mind, and emotions. In fact, all of these faculties are completely connected and interwoven in the fabric of the organism we call a human. On a literal and biological level one cannot say that the mind begins here and ends there, as if the mind were only the brain, and the body everything below the brain. Actually, nerve pathways, hormones, and genetic messages course throughout the body, connecting the messages of the brain throughout, and vice versa, from the entire body to the brain – the brain is part of the whole body. Feelings occur when internal, physiological processes trigger various emotional responses, as well as when external situations trigger biological and emotional reactions.

Becoming body-centered is also not meant to imply that you shouldn't exercise your intellect – in fact, quite the contrary. However, it is possible for your thoughts to subvert your emotions and physical sensations in a culture where we are taught to do so. Being body-centered means unlearning the process of subverting your body, while still using your intelligence. You are learning to override and transform the culturally imposed and inauthentic voices that tell you how you should think and how you should be, so that you can know and accept who and how you truly are.

All women can benefit by listening to their bodies. If you are new to this idea, it is important to practice so you

can be body-centered as well as teach your clients how to be so. Learning to listen to your body, like learning any language, takes time, commitment, and practice. People who are fluent in numerous languages often comment that the best way to learn a new language is to be totally immersed in hearing it, such as by spending time in a foreign country, or at least by surrounding oneself with native speakers of that language. Pregnancy, though not separate from the continuity of a woman's life, is a unique experience permitting a time of total immersion in the language of the body, with many physical sensations heightened.

Perhaps the most practical way to begin listening to your body is to pay attention to the most common messages you receive daily: hunger, thirst, fatigue, and elimination. Try to notice when you begin to feel the sensations that alert you to eat, drink, rest, or go to the bathroom. What are these sensations? When do you notice them? And most important, how do you respond to them? For example:

* Do you eat when you're hungry, or do you think about whether you should eat, and then skip a meal, afraid that if you eat too much you might "get fat"?
* Do you urinate when you feel the urge to, or like many women, do you put it off until a more convenient time or until you just can't wait any longer? Many women do the latter, not realizing that this can cause urinary tract infections, which women are especially susceptible to during pregnancy.
* Do you allow yourself to rest or sleep when you feel fatigued, or do you keep pushing yourself to do more until you collapse at the end of the day? Or do you push your body further with the help of coffee, chocolate, or sugar? Do you get down on yourself for being tired, thinking that you should be "getting more done"?
* Do you recognize that you may be feeling weepy, irritable, nauseous, faint, cold and clammy, or that you have a headache because your blood sugar is too low and you need to eat a solid meal?
* Did you know that particular food cravings are your body's way of calling out for specific nutrients? For example, you may be craving sweets because you need more energy, but your body really needs more protein, which provides you with a much more lasting type of energy than does sugar?

If you are like so many women you may realize that you are not listening to your body. Just by deciding to be more alert to your own needs, you'll find yourself recognizing and responding to your body's signals more readily, and feeling better for doing so. Keeping a journal can be a useful method for charting specific urges or sensations, as well as your responses and reactions. Practicing this skill can make you more intuitive in your own clinical work, and can be an invaluable skill you teach to your clients. It is one tool in the women's wisdom basket of healing tools.

Women's Wisdom and Motherwit

Women's wisdom is a term used to encompass the practices and beliefs that women have developed over centuries, and that still benefit women today. Motherwit is another such term, which has both European and African roots, and relates specifically to the practical wisdom of mothers.

For generations women have relied on intuitive and compassionate methods of understanding health and disease, as well as on practical physical methods of health care. Women have often been the primary

physicians for their families, tribes, and villages.

Women's wisdom and motherwit are also based on the stories that women tell about their lives and what we can learn from these stories - our lived experiences. Women's wisdom allows us to bring our whole selves into the picture, rather than fragmenting parts of ourselves for treatment. Likewise, women's ways of healing embrace the awareness that healing must occur in the person's life, not just in their body, and that physical healing alone cannot occur until the underlying factors of illness and discomfort are addressed.

Women's wisdom embraces "women's ways of knowing," such as intuition, subjective knowledge based on feelings and personal experience. These are all unexplainable, sympathetic experiences that allow us to realize the psychic aspects of our connections, both to our bodies and to each other. These experiences remind us that there is more to life than what meets the eye, and that there really is no separation between the mind, the body, and the spirit. Historically, modes of intuitive awareness have been attributed to women, women being considered more psychic, more closely related to the mysterious aspects of life due to our connections with pregnancy, birth, and menstruation. Although many cultures have revered women for our high capacity for intuitive awareness, in some traditions relying upon the dreams of menstruating women to foretell important events for a whole community, our culture has discredited this multi-sensory awareness, considering it unreliable, and even non-existent.

Women's wisdom, like much of the work that women do, is based on the human aspects of life, making connections stronger, and valuing emotional and sensory experiences. This kind of intuitive awareness is too common to be dismissed as merely coincidental, and it is too valuable for us to dismiss as fallacious. To reclaim women's wisdom is to put feminine modes of both intuition and intelligence into their respected places among the many options available to us for our health care. To reclaim women's wisdom is to proclaim that we are the true authorities about ourselves, and to reinstate traditionally feminine methods of healing as part of a sensible approach to medicine and wellness.

Boundaries of Care with Pregnant Women

Here are some basic guidelines that might be helpful in knowing when it's appropriate to work as an herbal consultant with pregnant women and how to do this with optimal safety.

- Consult only when you are certain that the problem is a common pregnancy concern unless you have specific training in midwifery or obstetrics that expands your scope of practice
- Consult on a medical problem of pregnancy ONLY in conjunction with, and with the agreement of the pregnant woman's primary obstetric provider (midwife, OB)
- Be sure that your client has a midwife or obstetrician signing off on her care; refer all clients to a midwife or OB in writing
- Provide an informed consent
- Know when you don't know and say so!
- Use only herbs that are considered safe during pregnancy

- Know the warning signs of pregnancy and do not consult when these are present unless with the express support of the primary obstetric care provider

The following are common concerns of pregnancy that herbalists can provided added support for:

Anemia
Backache
Colds
Constipation
Emotional Swings
Fatigue
Flu
Headache
Heartburn
Hemorrhoids
Itchiness
Morning Sickness
Sciatica
Stretch marks
Urinary Incontinence
Vaginal candidiasis
Varicosities

Keep in mind, though, that a number of these can be symptoms of more serious conditions or complications, for example, nausea and vomiting of pregnancy can be hyperemesis gravidarum, varicosities of the vulva can cause problems, headache could be preeclampsia, etc.

The remainder of this unit provides information on botanicals for a wide range of common and more serious pregnancy concerns and problems. They allow you to inform your clients of the options and also allow you to be a consulting resource on botanicals in pregnancy to the obstetric care providers in your community. Be wise, be humble, and you will be a great resource for pregnant women, midwives, and others!

HERBAL MEDICINE FOR WOMEN

Unit 3 Lesson 30

Miscarriage

Learning Objectives

By the end of this lesson you will be able to:

1. Describe the prevalence of miscarriage in the US
2. List and explain the major categories of miscarriage
3. List the possible causes of miscarriage
4. List the medical interventions for miscarriage
5. List and describe the characteristics of the most common botanical treatments for miscarriage as presented in this lesson and the associated required reading
6. Describe the potential psycho-emotional impact of miscarriage
7. Learn how to respond as an herbalist for symptoms of miscarriage in pregnancy
8. Create sample botanical protocols for various categories of miscarriage

Required Reading

Botanical Medicine for Women's Health, 2nd edition (Romm)

- The Role of Herbs in the Prevention and Treatment of Miscarriage, pp 377-382
- A Complete Guide to Miscarriage at Home - https://avivaromm.com/miscarriage-at-home/
- Miscarriage: Supporting Women Through Early Pregnancy Loss, Botanically

Key Terms

Be sure to familiarize yourself with the definitions for all key terms. These can be found in the course resources or using an on-line medical dictionary.

Blighted ovum	First trimester	Recurrent Miscarriage
Complete miscarriage	Incomplete miscarriage	Rh-negative
Dilatation and curettage (D & C)	Inevitable abortion	Spontaneous abortion
Dilatation and evacuation (D & E)	Missed abortion	Spontaneous miscarriage
Expectant management	Pelvic rest	Threatened miscarriage

Key Botanicals for this Lesson

Students should be familiar with the botanical name, common name, actions, common uses, forms of use, general dosage ranges, side effects, and contraindications of the herbs in the following list. Ideally, you will also be familiar with taste. This information can generally be found in the course and accompanying required reading materials.

Angelica archangelica

Cinnamomum spp.

Dioscorea villosa

Erigeron canadensis

Leonorus cardiaca

Mitchella repens

Viburnum opulus

Viburnum prunifolium

Vitex agnus castus

Unit 3 Lesson 30 Miscarriage

Introduction

Miscarriage is the most common pregnancy complication. As many as 15% of all known pregnancies will end spontaneously before 20 weeks, and it is unknown how many more end before a woman even realizes she is pregnant; this number has been estimated to be as high as 75% of all conceptions. As pregnancy progresses, the likelihood of miscarriage declines, so that by 8 weeks the chance of miscarriage is less than 5% if there is a healthy fetus. The type of miscarriage is defined by whether any products of conception have been expelled, and to what extent.

Miscarriage can be physically uneventful or dramatic; simple or complicated, occur at home without a problem or require medical intervention. Learning the signs and symptoms of miscarriage is essential, as is recognizing the signs of a problem. Having a referral or consultation relationship with an obstetrician or midwife is essential for herbal educators consulting about miscarriage.

Regardless of whether miscarriage is a physically smooth or difficult process for the woman, it is rarely emotionally uncomplicated. Feelings of loss, shame, grief, embarrassment, inadequacy, disappointment, and even relief with accompanying guilt, are all in the range of what women experience during and after a miscarriage.

Subsequent pregnancies where there has been previous pregnancy loss are usually accompanied by greater anxiety and stress than that experienced by women who do not have a history of pregnancy loss, and repeated loss is especially emotionally charged for women (and their partners).

A great deal of compassion and sensitivity is required when working with women in the vulnerable space of miscarriage, after miscarriage, and subsequent pregnancies after miscarriage.

Herbs can play a powerful role in the home care or women experiencing an uncomplicated miscarriage, can facilitate completing an incomplete miscarriage, and can be a part of miscarriage prevention. I've have been teaching at herbal conferences where on hosting an online event – and have received emails where a woman has said to me, "I have an Aviva baby." The first time I heard this I thought it was so peculiar. When the woman explained that she'd miscarried repeatedly until she tried the herbs recommended in The Natural Pregnancy Book or some lecture I'd given, I understood. It is such an honor to have someone say this to me, and still moves me to tears.

Key Signs and Symptoms of Miscarriage

Abdominal pain

Bleeding

Cervical dilatation

Cramping/Contractions

Decreased symptoms of pregnancy

Fetal demise

Loss of products of conception

Low backache

Spotting

Differential Diagnosis (Other Possible Causes) of First Trimester Vaginal Bleeding

- Cervical erosion, friability, lesions, or lacerations
- Ectopic pregnancy
- Hydatidiform mole
- Postcoital bleeding
- Reproductive tract anomalies
- Spontaneous abortion
- Trauma
- Vaginal or cervical lesions

Risk Factors for/ Causes of Miscarriage

- Advanced maternal age
- Autoimmune conditions (maternal)
- Cervical iinsufficiency
- Chromosomal abnormalities (fetal)
- Coagulation disorders (maternal)
- Endocrine disorders/hormonal insufficiency
- Environmental exposures
- Implantation problem (i.e., ectopic pregnancy)
- Infection
- Smoking
- Unknown causes

Key Diagnostic Findings

- Cervical dilatation
- Fetal demise seen on ultrasound
- Abnormally low quantitative serum beta-hCG

Warning Signs!

During a miscarriage

- Heavy vaginal bleeding/hemorrhage (>/= 2 pads soaked in 30 minutes)
- Sustained abdominal pain
- Loss of consciousness

After a miscarriage

- Elevated temperature (> 100.4 degrees F)
- Abdominal pain
- Foul smelling vaginal discharge
- Persistent vaginal bleeding greater than the amount and duration of a menstrual period

Questions to Ask

First, it is essential to clearly evaluate the situation before proceeding with botanical support or interventions. One must establish the type of miscarriage and the mother's health status. Safety comes first. Unless you are qualified to care for pregnancy complications, immediately refer any pregnant woman with vaginal bleeding to her midwife or OB, and if she has neither, to the hospital emergency department. If you are qualified to provide care to pregnant women (i.e., you are a midwife taking this course), questions you will want to ask include:

1. What are your symptoms?

- If there is bleeding or cramping proceed to the next questions.

2. Have you seen your midwife or OB? If yes, what was the diagnosis?
3. If there is bleeding, exactly how much?

-Terms like "a lot" and " a little" are not useful. Get specific. First, ask if she is bleeding steadily. Even if it is only a steady trickle, this can sneakily add up to a lot of blood loss. If a woman is bleeding continuously she should contact her medical care provider and in most cases she should go to the emergency room. If she is weak, faint, or losing consciousness, an ambulance should be called! A good way to gauge the volume of less dramatic, and non-continuous bleeding is to ask for amounts in relationship to familiar objects. I use coins and menstrual pads as references. For example, if there is spotting, are the spots the size of dimes or quarters? How many? And how many per half-hour? If she is bleeding enough to wear a pad, is she wearing panty liners or maxi pads? How quickly are these filling up?

Soaking 2 large pads in 30 minutes is considered a hemorrhage and requires more immediate medical evaluation than modest spotting. You will also want to ask if she has passed any tissue or clots.

4.Are you cramping or contracting?

If yes, how often, how intensely, how long are the cramps/contractions lasting, are they regular or increasing in frequency? Increasing frequency and intensity, or regularity, might mean an inevitable miscarriage.

5. Have you felt any subjective changes in your pregnancy symptoms (i.e., decreased nausea or decreased breast tenderness)? If yes, this might mean a change in pregnancy status, but this is so subjective as to not be very reliable.

A medical exam is going to be necessary to know whether the miscarriage is threatened, complete, or inevitable (a missed abortion is usually detected by ultrasound in the absence of obvious symptoms). This will be determined by pelvic exam to see if the cervix is dilated or if there is any protrusion of fetal tissue through the cervix, by ultrasound to see if the fetus is alive, and possibly by blood work to see if the serum hCG levels are normal or low. Once the diagnosis has been established, a decision can be made whether and how herbs might be appropriate to use.

If the miscarriage is inevitable, then expectant management is appropriate, and if the miscarriage is complete, nothing needs to be done other than supportive care.

Botanical Strategies

If the miscarriage is threatened, then a botanical protocol to reduce contractions can be given if they are present.

Uterine antispasmodic herbs can be given often—2-3 mL even up to every 15 minutes for an hour or two, if needed, and 2-4 every 30 minutes thereafter to control contractions.

You can generally expect the herbs to have noticeable action after the first several doses.

If symptoms of threatened miscarriage subside, slowly taper the dose back to every few hours, titrating your frequency according to the woman's symptoms, and increasing as needed until you reach an effective dose and frequency. Note that the uterine spasmolytics are also often herbs used as antihypertensives, and thus may slightly lower blood pressure. Though no clinical reports of syncope secondary to using these herbs have been reported

in the literature, herbalists have mentioned this phenomenon. Caution should be used to prevent fainting or falls, particularly if the mother is resting in bed and suddenly stands.

It is not uncommon, in the course of working with a woman with a threatened miscarriage, for it to become inevitable—it is very hard to prevent a miscarriage if the fetus is not healthy or if the pregnancy is significantly unstable. However, rarely, one can actually delay an inevitable miscarriage with frequent, high dose use of tocolytics, thus the titrating down the dose frequency mentioned above is also important as a "check-in" to see whether the miscarriage is proceeding in spite of efforts to forestall it. Regardless, the woman's body will eventually supercede and contractions will intensify and bleeding and expulsion of some amount of tissue will occur, along with cervical dilatation (which can be detected by a midwife or OB).

If the miscarriage is incomplete or missed, herbs may be given to stimulate uterine contractions to encourage expulsion of the uterine contents. The protocol for this will be reviewed later in the course in Lesson 39: Post Term Pregnancy, Partus preparators, and Prolonged Labor, as it is the same as for post term pregnancies. It is not uncommon for it to take several days to effectively stimulate contractions and ultimately labor, and often requires two to three attempts, usually the first on two consecutive days followed by a day of rest and a third attempt.

Uterine astringent herbs such as witch hazel, bayberry bark, yarrow, cinnamon and erigeron formula can be used to slow bleedingas part of a protocol, during and after a miscarriage. Herbs may also be given to control bleeding and encourage uterine involution. These categories of herbs are discussed in Lesson 41: Postpartum Care, Breastfeeding Problems, and Postnatal Depression which begins with the immediate postpartum.

Emotional Support

Miscarriage brings a wide array of emotions, and there's no right way to feel during or after. A woman may feel anywhere from grief to relief, depending on her hopes and goals at this moment in her life - and that's okay.

From a botanical support perspective, motherwort is the queen of herbs for post-miscarriage women , also supporting physical recovery as a uterine tonic and antispasmodic.

Many women who experience pregnancy loss find themselves in an all-consuming cycle of 'what ifs'. What if I had started taking prenatals earlier? What if I hadn't had that class of wine? Did that one doubtful thought do it? It's so important to know deep inside that there's nothing she did wrong. There's nothing wrong with her. There's nothing wrong with her body.

Miscarriage is incredibly common – it just seems like it's not because we're not talking about it due to grief, stigma, and shame and isolation around our reproductive health. In my family's cultural background, you don't tell anyone you're pregnant until 5 months to avoid the 'shame and embarrassment' if you miscarry.

We have to reframe shame and blame thinking around miscarriage. Over decades of work as a midwife I've learned that when we honor the experience and create sacred space around miscarriage - our bodies, brains, hearts, and psyches integrate the experience in a healing way. We experience the loss, yes, but we also experience a sense of completion, possibly even inner peace, and empowerment. While miscarriage can be terribly saddening and disappointing, it can simultaneously be sacred.

I've walked many women through this process and find it so important to create space, have support, and treat this experience as a significant life event, with a lot of self- love and time built in for self-care and healing. I believe that if we open up to our sisters, we can share our grief with those who help us carry it, and we open a conversation about pregnancy loss that is waiting to be had and create a path to healing for so many women.

Case 1: Missed Abortion and Miscarriage Prevention

Initial appointment: 30-year old woman in dire emotional distress having been informed by her nurse-midwife that her eight week old fetus had died and that her pregnancy was no longer viable. The CNM and obstetrician recommended dilatation and curettage (D&C), but the woman did not want to have this procedure performed.

She requested assistance in completing the miscarriage herbally. She also had a history of endocrine problems and repeated miscarriage, and wanted help should she become pregnant again, to prevent miscarriage. Her height is 5"8" and her weight 210 pounds.

Treatment protocol: The initial goal is to stimulate uterine contractions and promote the actual expulsion of the fetus, et al, from the uterus. Fetal demise appears to have occurred 2 weeks ago, and this woman has no signs of miscarriage. The cervix was closed and firm.

1. To initiate the ripening of the cervix, *Oenethera biennis,* in the form of evening primrose oil, was given orally as follows: two 500 mg capsules, twice daily. For a total of 2000 mg per day, for two days. Also, digitally apply 1500 mg EPO to the cervix (the mother can do this herself, her partner can do it, or she can go to a midwife for the treatment).

2. After 24 hours of EPO as above, initiate oral administration of the following tincture protocol:

Gossypium herbaceum	20 mL
Actaea raccmosa	20 mL
Caulophyllum thalictroides	20 mL
	Total 60 mL

Beginning in the morning take 30 gtt q hr for 4 hr, then discontinue. If no contractions ensue, repeat the next day as for day 1. If no contractions ensure discontinue on the third day, and resume for two more days on days 4 and 5.

3. The client was instructed to keep on hand *Angelica archangelica, Hamamelis virgaurea*, and other hemostatic herbs should bleeding be heavy.

Contractions began after the first 24 hours, and she continued the herbs until miscarriage seemed inevitable. She miscarried within the next 24 hours and was well pleased with the results, and relieved to be through this part of her ordeal.

Several months later the client, who has a history of progesterone insufficiency, as well as depression and

irritability, became pregnant again. At this point she was placed on the following herbal protocol to prevent miscarriage:

Tinctures of:

Vitex agnus castus	60 mL
Viburnum opulus	30 mL
Dioscorea villoa	30 mL
Total	120 mL

Dose 5 ml bid-tid. She continued this protocol throughout the first trimester of her pregnancy, 4 months after the miscarriage. The client carried this pregnancy to term and gave birth to a healthy baby. During the late pregnancy I received a letter from her stating, "I have had a great pregnancy so far."

Case 2: Threatened Miscarriage

Day 1: Cara is a 27-year old herbal student 8 weeks pregnant with her first baby. She is not sure whether she has ever been pregnant before because last year she had a period that was 2 weeks late and it was unusually heavy and clotty. She had not taken a pregnancy test, and had been using condoms, but it wasn't out of the realm of possibility. This time she was surely pregnant — she had a positive pregnancy test and had been having unprotected sex for a couple of months as she and her husband, a naturopathic student, were ready to have a baby. She noticed some pinkish mucus yesterday, but her vaginal discharge has generally been thicker and more unusual since she got pregnant, and she and her partner, Dan, had sex yesterday morning, so she figured that's all it was from. This morning she noticed more pink tinged mucus on her toilet tissue, and now, 2 hours later she is experiencing spotting. Answering your questions, she tells you that she's had about half dozen spots the size of a dime to a quarter so she is wearing a panty liner. There is no continuous bleeding. She is not having contractions, but she feels a lot of aching in her low back and groin, pretty much continuously. A hot shower helps a little but does not relieve the aching entirely. She has not passed any tissue from her vagina and has no leaking of fluid. Her breasts have remained quite tender and she still feels nauseated in the morning, which began about a week ago. You suggest she take cramp bark for the aching and send her to see her midwife for an exam with instructions to call you after the appointment.

Day 1 later: Cara has seen her midwife. Upon vaginal ultrasound the baby appears normal for dates and a beating heart is seen. There is still some spotting but her cervix is not dilating. She is cramping more often and more painfully, but without any regularity or increasing frequency. You suggest a formula of equal parts cramp bark and wild yam tinctures to ease the cramping. It is to be taken in 2-4 mL does every 30 minutes or less as needed.

Day 2: Cara calls to check in. The cramping has stopped so she discontinues the tincture. She is still spotting, but only a tinge of red in the toilet tissue.

Day 3: After stopping the tincture the cramping resumed so Cara started taking it again and it seems to keep the cramping under control. You tell her she can stay on the tincture for several days and to wean off of it after that.

Day 8: Cara calls to tell you she is now starting to wean off of the tincture.

Day 11: Cara is off of the tincture and has no more cramping.

Day 284: Cara calls to tell you she gave birth to a beautiful healthy daughter 2 days ago.

Thought Questions (you do not need to submit these answers, but walk through the scenarios and answer these for yourself. If you are unsure how you might respond, or wish to submit your answers, feel free to do so.)

1. A woman calls your office and says that she is 9 weeks pregnant, has been bleeding, cramping, and passing small clots for 3 days. Name 5 questions you would ask her to get more specific information on this situation.
2. She tells you that she is convinced that the baby has already died and that she needs help completing the miscarriage. What do you tell her?
3. She asks you for an herbal protocol to help complete the miscarriage. What do you do?
4. Should you require that a client see a medical professional and obtain proof of a non-viable pregnancy before you initiate a protocol to complete a miscarriage?
5. Scenario 1: You ascertain from a vaginal ultrasound report that indeed, she is no longer pregnant. How might you proceed?
6. Scenario 2: Vaginal ultrasound reports a viable baby of 9 weeks gestation. How might you now proceed?

HERBAL MEDICINE FOR WOMEN

Unit 3 Lesson 31

Nausea and Vomiting of Pregnancy

Learning Objectives

By the end of this lesson you will be able to:

1. Define and differentiate between NVP and *Hyperemesis gravidarum*
2. List common comfort measures for NVP
3. Describe the risks of *Hyperemesis gravidarum*
4. List and describe the characteristics of the most common botanical treatments for NVP and *Hyperemesis gravidarum* as presented in this lesson and the associated required reading

Unit 3 Lesson 31 Nausea and Vomiting of Pregnancy

Required Reading

Botanical Medicine for Women's Health, 2nd edition (Romm)

- Nausea and Vomiting of Pregnancy and *Hyperemesis Gravidarum,* pp 382-390 (read or listen – audio below)

Key Terms

Be sure to familiarize yourself with the definitions for all key terms. These can be found in the course resources or using an on-line medical dictionary.

- Antiemetic
- Hydatidiform mole
- Hyperemesis gravidarum
- Hypoglycemia
- Molar pregnancy
- NVP
- Vitamin B6

Key Botanicals for this Lesson

Students should be familiar with the botanical name, common name, actions, common uses, forms of use, general dosage ranges, side effects, and contraindications of the herbs in the following list. Ideally, you will also be familiar with taste. This information can generally be found in the course and accompanying required reading materials.

Ballota nigra

Cannabis spp.

Dioscorea villosa

Matricaria recutita

Mentha piperita

Taraxacum officinale

Zingiber officinalis

Unit 3 Lesson 31 Nausea and Vomiting of Pregnancy

Introduction

More than 70% and as many as 88%% of pregnant women will experience nausea and vomiting to some extent during pregnancy. "Morning sickness," or nausea and vomiting of pregnancy (NVP) often occurs in the morning but may occur any time of the day. Some women experience only nausea, others both nausea and vomiting.

NVP usually begins around 6 weeks gestation, though it may start earlier, and usually abates by 16 to 18 weeks, though may persist for much or all of the pregnancy in as many as 5% of pregnancies.

Possible causes include the heightened sense of smell that commonly occurs in pregnancy, hypoglycemia, elevated serum estrogen, progesterone, and hCG, and physiologic changes of pregnancy for example, delayed gastric emptying reflux, and constipation. It has been posited that NVP and Hyperemesis gravidarum (see below) also have a psychological component.

For some women, simple comfort measures such as dry crackers and ginger ale, avoiding an empty stomach, and avoiding offending foods and odors is enough to control symptoms; other women are incapacitated by the nausea and vomiting.

When vomiting is severe and persistent, and results in substantial weight loss and ketonuria, it is considered Hyperemesis gravidarum, and can become a serious medical condition if not properly managed, and may require long-term management throughout the pregnancy.

A hydatidiform mole (molar pregnancy) can also cause severe nausea and vomiting.

Key Symptoms

- Appetite loss
- Dry heaving
- Gagging
- Nausea
- Vomiting
- Weight loss

Key Diagnostic Findings: Hyperemesis gravidarum

- Anorexia
- Electrolyte abnormalities – hypokalemia, metabolic acidosis
- Elevated liver enzymes
- Hyperthyroidism – transient
- Ketonuria
- Neurologic signs – if Wernicke's encephalopathy develops
- Weight loss

Botanical Treatment Strategies

- Antinauseants
- Antiemetics
- Bitters

NVP is one of the hardest conditions to treat consistently partly because something that is tolerated by mouth one day may cause nausea, gagging, or vomiting the next. My goal is therefore to try to achieve at least modest relief so that a woman can eat and function in her daily life. The herbs are one part of a broader general plan that includes the "Additional Treatments" presented below and, if necessary, some of the medical therapies, though this is rarely required, with the exception of vitamin B6, except in cases of severe hyperemesis. Caught quickly, hyperemesis can be controlled at least so it does not progress to the stage where hospitalization is required (however, if it does progress or is relentless, do not avoid medical care!).

Some herbs and dietary approaches can bring quick relief, for example, a ginger soda or ginger candy and a light carbohydrate snack if a woman has hypoglycemia and is becoming nauseated. However, remember that with NVP what works today may not work tomorrow, so varying the techniques can be useful.

Nutritional Approach

- Avoidance of trigger foods and odors
- Frequent light snacks to avoid hypoglycemia
- Mints or sour hard candies
- Ginger ale or another tolerable carbonated beverage

- Avoid drinking plain water and warm water – adding fresh squeezed lemon to water can help
- Eat lightly salted dry snacks such as crackers and pretzels
- Avoid prenatal vitamins and iron supplements if they trigger NVP (However, taking a multivitamin starting at conception may help prevent NVP/ Hyperemesis gravidarum
- Vitamin B6
- Acupuncture/acupressure
- Therapy/counseling/hypnosis

Questions to Ask

Most women will not seek help for mild NVP as it is an expected "side effect" of pregnancy and there is a great deal of information available on self-treatment with diet and simple comfort measures. Most women know that "this too shall pass." So if a woman is seeking your counsel, she is probably feeling quite poorly.

Ask:

1. How many weeks pregnant are you now?
2. When did the NVP start?
3. Are you just nauseated or are you also vomiting?
4. Are you having any other symptoms? (tingling in the extremities, visual changes, other neurologic symptoms are serious symptoms and a woman with these requires medical attention)
5. Are you able to keep food down? Fluids? (if the woman is unable to keep down any foods or fluids, intravenous rehydration may be needed promptly if home measures are unsuccessful)
6. How often are you eating? What are you eating?
7. Do you know if you have lost any weight? If yes, how much and what was your starting weight? (if the woman has lost 5% or more of her pre-pregnancy body weight, an evaluation by her midwife or OB is warranted)
8. Have you tried any home remedies or other treatments? Has anything helped?
9. Are you taking any medications? (a number of medications are used to treat NVP but none are approved for use in pregnancy, thus all pregnant women should check with their midwives or OBs prior to taking a medication).

Risks/Cautions

Untreated, severe NVP and Hyperemesis gravidarum can lead to dehydration, malnutrition, and if untreated, in rare cases nutritional deficiency can lead to the serious neurological condition known as Wernicke's encephalopathy. Therefore, it is advisable that any women who has had protracted vomiting or who has been unable to eat or drink for several days be evaluated by her midwife or OB prior to beginning home treatment or botanicals for her condition. However, as long as hydration and nutrition are properly maintained and as long as overall weight gain remains within normal, there are no expected adverse outcomes for the mother or her baby associated with this condition.

Case

Identification/Chief complaint: Jenn began vomiting at 12 weeks pregnancy. Since that time the nausea and vomiting have become progressively worse, and for the past few days even sips of water or the smell and sight of food — even dry toast, makes her sick to her stomach.

Putting anything in her mouth makes her gag and vomit. She thinks that she may be urinating less than she had been and is feeling worried about the baby's safety. Otherwise, everything seems to be normal when she compares this pregnancy to her previous two pregnancies with her kids who are now 4 and 2 years old, but this nausea and vomiting is much worse than she's ever experienced.

She had an ultrasound which showed a healthy singleton pregnancy. Serum beta-hcg and thyroid levels are normal.

Social history: married for 7 years, stay-at-home mom, non-smoker

Psychiatric history: none

Gynecologic history: G3P2, severe nausea with prior pregnancies

Review of systems: otherwise normal

Physical Exam: Her mucus membranes are slightly dry but her skin does not appear dehydrated.

Labs / Data: Urine slightly concentrated, trace of protein, trace of ketones. Jenn has maintained her pre-pregnancy weight and has not experienced any weight loss or gain.

Case Discussion: enn, a 32-year old mother of 2, 12 weeks pregnant with her 3rd child, is experiencing severe nausea and vomiting, with declared inability to ingest food and beverages for 3 days. She is vomiting 4-5 times daily and feels weak and tired.

Unit 3 Lesson 31 Nausea and Vomiting of Pregnancy

Assessment and Plan

Jenn began care with me as her midwife at 8 weeks of pregnancy. I'd helped her with her previous pregnancy as well, which culminated in a beautiful water birth at home. She'd experienced fairly significant NVP in that pregnancy, but this was much worse.

Complicating matters, Jenn has a phobia about vomiting — she has to leave the room even if one of her kids has to vomit.

This third pregnancy was unplanned and actually occurred with the use of a condom and diaphragm for contraception! Jenn was already feeling overwhelmed with the two young ones and her husband recently started a new job requiring long hours at work. Additionally, his new work colleague was a very attractive unmarried woman, and though her husband had always been faithful, Jenn felt self-conscious about her body and how it would change during the pregnancy, and how the additional demands of a third child might affect the marriage which has been stressful as of late.

In addition to common comfort measures and general food recommendations, Jenn was instructed to do the following:

1. Place a small piece of a cotton ball in the bottom of a small medicine vial. Soak the cotton ball with 10 drops of peppermint oil. Keep this in your pocket, open and take a whiff of the scent when nausea is overwhelming and as needed.

2. Sip ginger ale (such as Reed's Ginger Beer with real ginger) as needed, up to every 15 minutes. Take only a few sips at a time. If you vomit, it's okay, just take a few sips after. You can alternate ginger ale with lemon- (or other) flavored carbonated water.

3. Take Vitamin B6, 50 mg twice daily

4. Purchase Sea-bands and wear daily.

Follow-up: Throughout the pregnancy, Jenn continued to be highly sensitive to smells and easily became queasy, but not nearly to the extent she had earlier in the pregnancy, and she no longer vomited.

She gained 18 pounds, which was quite reasonable for her as she was about 45 pounds overweight at the start of the pregnancy. She gave birth, again at home, at 38 weeks pregnancy, to a nine-pound son in excellent health and had a normal postpartum recovery.

HERBAL MEDICINE FOR WOMEN

Unit 3 Lesson 32

Constipation and Hemorrhoids

Learning Objectives

By the end of this lesson you will be able to:

1. Understand the etiology of constipation and hemorrhoids in pregnancy
2. List and describe lifestyle modifications that can be beneficial in the prevention and treatment of constipation and hemorrhoids in pregnancy
3. List and describe the characteristics of the most common botanical treatments for constipation and hemorrhoids as presented in this lesson and the associated reading
4. List the categories of herbs, and the specific herbs that are contraindicated for the treatment of constipation during pregnancy

Unit 3 Lesson 32 Constipation and Hemorrhoids

Required Reading

Botanical Medicine for Women's Health (Romm)

- Constipation During Pregnancy, pp.398-401
- You will need to reference Iron Deficiency Anemia, pp. 393-396 and Varicosities, pp. 416-419

Review relevant herb monographs from Key Botanicals list below

Key Terms

Be sure to familiarize yourself with the definitions for all key terms. These can be found in the course resources or using an on-line medical dictionary.

Anthraquinone

Astringent

Bulk laxative

Constipation

Hemorrhoids

Stimulating laxative

Varicosity

Venotonic

Key Botanicals for this Lesson

Students should be familiar with the botanical name, common name, actions, common uses, forms of use, general dosage ranges, side effects, and contraindications of the herbs in the following list. Ideally, you will also be familiar with taste. This information can generally be found in the course and accompanying required reading materials.

Achillea millefolium

Aesculus hippocastanum

Black tea

Cassia senna

Chondrus crispus

Hamemelis virginiana

Linum usitatissimum

Matricaria recutita

Pimpinella anisum

Plantago psyllium, P. ovata

Quercus alba

Rumex crispus

Taracaum officinale

Ulmus rubra

Urtica dioica

Zingiber officinale

Note that while licorice is not entirely contraindicated for use during pregnancy, long-term use is not advisable. Long-term use of senna can lead to dependency, and is therefore not recommended for more than a few weeks consecutively.

Contraindicated Herbal Laxatives

These herbs may stimulate labor increasing the risk of preterm labor or may contain constituents that are harmful to the fetus.

Aloe	*Aloe vera*
Buckthorn	*Rhamnus cathartica*
Cascara	*Frangula pershiana*
Castor oil	*Ricinus communis*
Chinese rhubarb	*Rheum palmatum*

Introduction

Elevated progesterone, the increasing weight of the growing baby and placenta, and increased water absorption in the bowel all combine to hinder intestinal motility and place mechanical pressure on the bowel, making constipation a common problem in pregnancy. These factors, including the constipation itself and increased blood vessel laxity, also a result of pregnancy hormones, increase hemorrhoid development. Ironically, both iron deficiency anemia and supplemental iron can lead to constipation – kind of a double whammy. Lesson 33: Anemia addresses anemia and iron supplement-related constipation.

Hemorrhoids, which are varicosities of the anal canal, affect as many as 40% of pregnant women. These common pregnancy problems increase as pregnancy progresses. Constipation is an annoying problem to women, can cause discomfort and even nausea, and if severe, can obstruct the descent of the fetal head in labor.

Read/listen to the content from Botanical Medicine for Women's Health for a review of the lifestyle, dietary, and botanical approaches to treating constipation.

Botanical Strategies for Hemorrhoids

All of the dietary and lifestyle approaches for preventing and treating constipation apply to the prevention and treatment of hemorrhoids. Below are botanical strategies.

Use of topical astringents is key.

One down and dirty tip is to use a black tea bag, steeped in a small amount of hot water, and applied to the hemorrhoid. Only problem is black tea stains (tannins = tanned leather!) so have mom where old panties and a pad, and if getting into bed, protect the sheets.

Or use one of the following tinctures applied via a cotton ball or cotton 'cosmetic pad' that has been soaked in one of the following:

- Plantain (*Plantago* spp.)
- White oak bark (*Quercus alba*)
- Witch hazel (*Hamemelis virginiana*)
- Horse chestnut (*Aesculus hippocastanum*)
- Yarrow (*Achillea millefolium*)

One of my favorite tried and true recipes is homemade "Tucks pads" – as follows:

- "Fill" a 4 ounce round wide-mouth glass bottle with organic cotton pads, stacked vertically (think Pringles in their container)
- Now fill the bottle again with witch hazel extract (the kind you get at the pharmacy is perfect)
- Add 10 drops of lavender oil.
- Cover, shake well.
- Apply as needed directly to the hemorrhoid, up to 4x/day.
- You can also substitute 1 oz of the witch hazel with 1 oz of yarrow tincture in this recipe.

Venotonic Herbs - Horse chestnut (*Aesculus hippocastanum*), Nettles (*Urtica dioica*) – are also appropriate for treating hemorrhoids and are both used internally in Europe during pregnancy, however there is scant safety data on the use of horse chestnut internally in pregnancy, so only use during late 3rd trimester if at all for this purpose.

HERBAL MEDICINE FOR WOMEN

Unit 3 Lesson 33

Iron Deficiency Anemia

Learning Objectives

By the end of this lesson you will be able to:

1. Define iron deficiency anemia and describe the symptoms of iron deficiency anemia
2. Understand the role of lab testing in iron deficiency anemia
3. List the causes and common treatments for iron deficiency anemia
4. Differentiate between iron deficiency anemia and other types of anemia, as well as conditions that can present with symptoms similar to iron deficiency anemia
5. Describe the risks of iron deficiency anemia to the pregnant woman and her infant
6. List the iron rich foods, and describe the pros and cons of iron supplements in pregnancy
7. List and describe the characteristics of the most common botanical treatments for iron deficiency anemia as presented in this lesson and the associated required reading, including the categories of laxative herbs that are safe for use during pregnancy

Unit 3 Lesson 33 Iron Deficiency Anemia

Required Reading

Botanical Medicine for Women's Health, 2nd edition (Romm)

- Iron Deficiency Anemia, pp 393-396

Review relevant herb monographs from Key Botanicals list below

Optional Hands-On Botanical Recipe

If you choose to make the dandelion-iron-tonic syrup you'll need the following supplies:

- 1/2 ounce dandelion root
- 1/2 ounce yellow dock root
- 1/4 cup high-quality honey
- 1/2 cup blackstrap molasses
- 1 pint glass jar with lid

Key Terms

Be sure to familiarize yourself with the definitions for all key terms. These can be found in the course resources or using an on-line medical dictionary.

Anemia

Folic acid

Hematocrit

Hemodilution

Hemoglobin

Megaloblastic anemia

Palpitations

Pernicious anemia

Pica

Refractory

Thalassemia

Key Botanicals for this Lesson

Students should be familiar with the botanical name, common name, actions, common uses, forms of use, general dosage ranges, side effects, and contraindications of the herbs in the following list. Ideally, you will also be familiar with taste. This information can generally be found in the course and accompanying required reading materials.

- *Floradix Iron and Herbs*
- Liquid chlorophyll
- *Rumex crispus*
- *Taraxacum officinale*
- *Urtica dioica*

Introduction

Anemia is the condition of low hemoglobin. It is considered to be the most common chronic disease and is especially common in pregnant women worldwide. A woman may already be anemic when she enters pregnancy or may become anemic due to insufficient dietary iron or due to a greater demand on stored iron than is being supplied.

During pregnancy the body's demand for iron goes up to meet the needs of the fetus for iron and to compensate for physiological blood volume expansion and to prepare for blood loss at birth. The blood volume expands by about 35-50%, with additional iron required to meet the needs of the fetus, placenta, and increased maternal tissue. In part, this creates the appearance of anemia due to hemodilution, when in fact, iron levels have not declined. However, in the 2nd and 3rd trimesters iron requirements do increase to three times the non-pregnant needs, so attention to dietary iron is important. Interestingly, obstetrics gives very little attention to diet in pregnancy, and gives attention to iron needs only if the woman has become anemic.

Current practice is to supplement iron if a woman is at risk for deficiency or has a hemoglobin (Hb) below 10 [or hematocrit (Hct) below 30]. Homebirth midwives, on the other hand, prefer Hb and Hct ("H & H") to be 12 and 35, respectively, or above. Iron deficiency anemia decreases quality of life due to symptoms of fatigue, weakness, loss of appetite, and increased susceptibility to infection (see Symptoms), and increases the risk of a number of problems including severe anemia from normal blood loss during labor requiring blood transfusions. Fetal iron stores in the first six months of life are dependent upon maternal stores during pregnancy.

Postpartum anemia is a contributing factor to postpartum depression. Chronic and severe iron deficiency can actually lead to heart disease over time. Non-anemic pregnant women do not require iron supplementation beyond the 15 mg present in prenatal vitamins. It is recommended that women with iron deficiency anemia (first or third trimester hemoglobin Hb <11 g/dL or second trimester Hb ≤10.4 g/dL and low serum ferritin) should

receive an additional iron supplement of 30 to 120 mg per day until the anemia is corrected. However, as in most cases with a natural approach, an ounce of prevention is worth a pound of cure.

Finally, a pregnant woman could have a genetic blood variation such as sickle cell or Thalassemia traits that lead her to be normally anemic and which do not require nor will they respond to iron therapies. Therefore, any woman with anemia not responding to treatment after a one-month duration should be evaluated medically. However, it could simply be poor iron absorption, though this rarely occurs with herbs though is common with conventional iron supplements. Taking iron supplements with calcium foods interferes with its absorption; taking it with vitamin C enhances absorption.

Key Symptoms

- Symptoms of iron deficiency anemia can include:
- Altered behavior
- Muscle dysfunction
- Altered resistance to infection
- Pallor
- Appetite loss
- Palpitations
- Brittle nails*
- Pica
- Cheilosis* (fissures at the corners of the mouth)
- Poor scholastic performance
- Constipation
- Tachycardia
- Easy fatigability
- Tachypnea on exertion
- Irritability
- Weakness

* in severe iron deficiency

Key Diagnostic Findings

- First or third trimester hemoglobin Hb <11 g/dL
- Second trimester Hb ≤10.4 g/dL
- Low serum ferritin

Botanical Treatment Strategies

Herbs and foods are often highly bioavailable, and usually non-constipating, non-nauseating sources of absorbable iron. In order to maximize the effects of herbs in blood building formulas it is best to consider them as foods which need to be taken in the forms of infusions, decoctions, syrups and stews. Taraxacum and Rumex may be used in syrup form in addition, for their liver stimulating and supporting qualities, needed for blood production. Iron supplementation is not necessary unless a woman is anemic, but iron rich foods and herbs can be included as a regular part of the diet. If there is iron deficiency anemia, herb and food based supplements can be a first line of treatment in the absence of an underlying medical disorder, in which case the cause must be treated as well, though herbal and food sources of iron can still be used as highly bioavailable supplements in many cases. Specific herbal and food sources of iron are discussed in Botanical Medicine for Women's Health.

And remember, green leafy vegetables such as kale and collard greens are iron (and calcium) rich and are herbs, too!

Additional Treatment

Consumption of both iron-rich and vitamin C-rich foods is essential for the production of iron. Floradix is an herbal-food supplement that is excellent for treatment of anemia. Note that Floradix does contain some herbs that are found on contraindicated lists, for example, angelica, however, the amount is small and no problems have been reported even with extensive use by pregnant women.

Exercise is an essential component of treating anemia as it aids in hemoglobin production, increases the appetite, and reduces fatigue and irritability.

Questions to Ask

- Have you previously been anemic?
- Have you been experiencing any noticeable blood loss (i.e. blood in the stools)?
- Do you get iron rich foods in your diet? (Ask for specifics – what foods, how much, how often)

- Have you ever been diagnosed with or do you have a family history of a genetic blood variation or disorder?
- If a woman is supplementing her iron but is not getting a response, ask whether she takes her iron with dairy products. If yes, tell her this interferes with iron absorption.

Risks/Cautions

Unresponsive anemia may be due to other causes than iron deficiency. If the hematocrit or hemoglobin levels have not shown improvement after 4 weeks of diligently following an herbal protocol of increased iron-rich food consumption and herbal supplementation, seek further medical evaluation.

The risk of a pulmonary embolism (PE), a clot that has traveled to the lungs, is increased during pregnancy due to changes in blood clotting. Both PE and iron deficiency anemia can cause shortness of breath (dyspnea) and rapid heart rate (tachycardia), therefore any woman with a sudden onset of these symptoms should be evaluated medically and immediately.

Case Review

Aisha, a 24-year old woman, 36 weeks pregnant, with a hemoglobin of 10 and a hematocrit of 30. Experiencing fatigue, shortness of breath (SOB), and heart palpitations at night. Due to the advanced state of her pregnancy, important to raise iron levels quickly. Protocol included daily intake of the following:

- Floradix Iron and Herbs as directed on package
- 1 Tbs liquid chlorophyll along with 250 mg Vitamin C
- Blackstrap molasses 1 Tbs daily with 250 mg Vitamin C
- Beef stew cooked with tomato base and black pepper added, 2x week

Visit 2: 39 weeks pregnancy. Hemoglobin at 12.5. Heart palpitations completely abated. No SOB, still some fatigue which seems normal for late pregnancy. Will maintain protocol for duration of pregnancy and will continue Floradix during the postnatal period.

HERBAL MEDICINE FOR WOMEN

Unit 3 Lesson 34

Inflammatory Bowel Disease and Heartburn During Pregnancy

Learning Objectives

By the end of this lesson you will be able to:

1. Be familiar with the types of irritable bowel disease (IBD) and their impact on pregnancy
2. Understand the risks of ulcerative colitis in pregnancy
3. Understand the frequency and causes of heartburn in pregnancy
4. List the basic herbal strategies and approaches to heartburn and IBD in pregnancy

Unit 3 Lesson 34 IBD and Heartburn During Pregnancy

Required Reading

Botanical Medicine for Women's Health, 2nd edition (Romm)

- Heartburn (Gastroesophageal Reflux), pp 391-393
- [Revisit] The Actions of Herbs, pp 30-45

Principles and Practice of Phytotherapy (Mills and Bone)

- Review relevant herb monographs from Key Botanicals list below

Key Terms

Be sure to familiarize yourself with the definitions for all key terms. These can be found in the course resources or using an on-line medical dictionary.

Anti-inflammatory

Colitis

Corticosteroids

Crohn's disease

Lower esophageal sphincter (LES)

Gastroesophageal reflux

Inflammatory bowel disease

Irritable bowel disease

Key Botanicals for this Lesson

Students should be familiar with the botanical name, common name, actions, common uses, forms of use, general dosage ranges, side effects, and contraindications of the herbs in the following list. Ideally, you will also be familiar with taste. This information can generally be found in the course and accompanying required reading materials.

Althea officinalis

Amygdalis cimmunis

Calendula officinalis

Cinnamomum spp.

Dioscorea villosa

Echinacea spp.

Glycyrrhiza glabra

Hypericum perforatum

Matricaria recutita

Pimpinella anisum

Rubus idaeus

Rubus villosus

Ulmus fulva

Viburnum opulus or *V. Prunifolium*

Withania somnifera

Zingiber officinalis

Unit 3 Lesson 34 IBD and Heartburn During Pregnancy

Introduction

This is a very brief overview lesson on two common, and very different, digestive problems that can occur in pregnancy. Heartburn is a common problem that may have been chronic for the client, but more likely arises as a common pregnancy complaint that worsens as the pregnancy progresses and occurs due to hormonal changes on esophageal sphincter tone combined with increasing mechanical pressure of the growing baby upward on the stomach. IBD is a more complicated condition that is usually already a chronic problem in a woman's life prior to pregnancy, but which may be exacerbated in pregnancy. IBD is not uncommon in the population, and I use this condition to illustrate one of the more complex types of cases that can arise in herbal practice using an example of ulcerative colitis from my own practice in which the use of a partially contraindicated herb is safer than the available medications. The condition causes a significant variety of symptoms that need to be relieved or at least reduced, which while not generally life threatening, can have a significant impact on the mother's and baby's wellness, particularly decreasing it secondary to poor nutrition and poor weight gain. This is not meant to be a comprehensive lesson on IBD and will focus on UC, however, many of the herbal treatments are similar for those with Crohn's disease.

Heartburn

Heartburn, or reflux, has similar origins to constipation – but in this case, progesterone's slowing effect on intestinal motility may lead to delayed stomach emptying and also relaxation of the lower esophageal sphincter (LES), while the increasing pressure of the growing uterus on the stomach, and sometimes the need to eat later at night to keep up with nutritional needs in pregnancy, conspire to create the right environment for heartburn.

IBD: What is it?

Inflammatory bowel disease includes ulcerative colitis (UC) and Crohn's disease. Ulcerative colitis is a disease of recurrent bouts of inflammation of the mucosal layer of the colon. It almost always involves the rectum and may extend continuously to involve other portions of the colon.

Key Symptoms

Heartburn

Feeling of "heartburn"

Regurgitation

"Something in my throat"

The symptoms are generally worse after meals and when the woman is supine or reclining

Ulcerative Colitis

Mild:

- intermittent rectal bleeding associated with the passage of mucus, and the development of mild diarrhea with fewer than four small loose stools per day
- mild crampy pain
- periods of constipation are also common
- tenesmus (sensation of needing to have a bowel movement)

Moderate:

- abdominal pain that is not severe
- frequent loose, bloody stools (up to 10 per day)
- low-grade fever
- mild anemia

Severe:

- bleeding often necessitating blood transfusion
- extensive colon involvement
- fever
- frequent loose stools (greater than 10 per day)
- rapid weight loss/ poor nutritional status
- severe cramps
- toxic megacolon may occur and may lead to colonic perforation requiring emergency surgery

Complications in Pregnancy from UC

Studies suggest that women with IBD are at a slightly higher risk for adverse pregnancy outcome, however, this is specifically due to the severity of the condition prior to pregnancy and the type of treatment used during pregnancy. With ulcerative colitis, if a woman is in remission at the time of conception, she is likely to remain so throughout pregnancy, though up to 30% of women will experience relapse. If UC is active at the time of conception, then it will likely remain so during pregnancy. Complications occurring during pregnancy in women whose disease is active are similar to those in non-pregnant patients with ulcerative colitis. There is some

evidence that demonstrates a higher risk of low birth weight babies of moms with UC, and if UC relapse is severe, prematurity may also be increased. Surgery is a more complicated matter in pregnancy, though it can be performed in severe cases where there is extensive disease or a medical complication from UC. The good news is that in the postpartum, relapses may recur less often for up to 3 years. The disease patterns and risks are similar with Crohn's in pregnancy, but with a well-documented increase in the risk of having low birth weight infants and premature delivery.

Whenever possible with both conditions, it is optimal to time conception for a time when the mom is in remission to decrease the occurrence of relapse in pregnancy, and in both illnesses, the mother's nutrition and weight gain should be carefully monitored, as well as her iron levels, as she can have appreciable anemia from both blood loss and chronic inflammation.

Conventional Treatment

Heartburn

Dietary strategies

- Avoid coffee, black tea, spicy foods, acidic foods, and citrus,
- Avoid eating too close to bed
- Eat mindfully, in as relaxed an environment as possible
- Chew well and eat slowly

Lifestyle strategies

- Sleep with one's head elevated about 45 degrees above the stomach

UC

The mainstay of medical treatment of UC is medication. While many are considered safe during pregnancy, they are also known to cross the placenta and are considered "big gun" drugs. In moderate to severe cases the use of these medications outweighs the risks of disease if management cannot otherwise be achieved. Following is a list of the most commonly used UC drug therapies:

- Sulfasalazine – considered safe during pregnancy; can be found in umbilical cord blood at similar concentrations to maternal blood

- 5-ASA drugs – Limited evidence suggests that oral and topical use are safe during pregnancy
- Antibiotics – Metronidazole and Ciprofloxacin

  Metronidazole: not associated with an increased risk of birth defects or cancer in humans, but only short-term use is recommended in pregnancy due to mutagenicity in bacteria and carcinogenicity in rodents.

  Ciprofloxacin should not be used during pregnancy due to effects on growing cartilage in animals and humans. It should not be used during lactation.

- Corticosteroids – Risk outweighed by their benefits when they are necessary. Limited experimental evidence in animals shows that high doses of corticosteroids may lead to cleft palate, a risk that is moot after 12 weeks gestation when the palate is closed. Neonatal adrenal insufficiency and low birth weight are rare. Can increase risk in women predisposed to pregnancy-induced hypertension, gestational diabetes, and preterm delivery from premature rupture of membranes.

- 6-Mercaptopurine and Azathioprine – Teratogenicity has been reported in fetuses when either mother or father was taking these drugs prior to/at conception. However, in severe cases, when no other management is possible, these medications are sometimes used.

- Cyclosporine – Teratogenicity appears to be low, but premature labor and small for gestational age infants have been reported. Considered safe during pregnancy.

- Methotrexate – Methotrexate is a potent abortifacient, and its use during pregnancy is associated with multiple skeletal abnormalities. This drug should not be taken by men or women prior to conception.

- Infliximab – No maternal toxicity, embryotoxicity, or teratogenicity to infliximab observed in a mouse study conducted by the manufacturer. No other data available on pregnancy safety at this time.

- Antidiarrheal drugs – Case reports in humans have suggested a potential for fetal malformations in infants exposed to diphenoxylate with atropine during the first trimester. This has not been seen in animal studies.

- Flexible sigmoidoscopy is considered safe during pregnancy; less is known about the safety of colonoscopy in pregnancy and thus it is best avoided.

Botanical Treatment Strategies

Heartburn

Botanical strategies for heartburn are largely limited to slippery elm bark (which is also endangered) and marshmallow root, both of which act as soothing demulcents, with DGL licorice available for more occasional use for severe symptoms in late pregnancy. Note that mint – especially peppermint and spearmint, can act to relax the LES and worse reflux – so should be avoided in people with this symptom. Please see the chapter in Botanical Medicine for Women's Health on prevention and treatment of heartburn.

UC

The general botanical strategies for helping to mitigate the symptoms of UC during pregnancy include judicious use of:

Anti-inflammatories

Antidiarrheal astringents

Antispasmodics with affinity for the bowel

Carminatives

Nervines

Vulneraries

Teas, infusions, and decoctions are the preferable form for taking these herbs due to best distribution in the alimentary canal as well as avoidance of alcohol in tinctures which can be irritating to the mucosa over time. Keep in mind that there are many more herbs that can be used in the treatment of IBD in the non-pregnant client. This section focuses on those herbs appropriate during pregnancy.

Additional Treatment

Heartburn

Individuals with GERD may wish to experiment with avoiding all, or some, of the following:

- Fatty or spicy foods
- Coffee (decaffeinated or caffeinated), chocolate, and alcohol

- Tomato products, e.g., tomato sauce, pizza
- Peppermint and ginger
- Drinking more than one cup of fluids with a meal

Other practices may help to improve symptoms:

- Eat small frequent meals (6-8 a day)
- Elevate the head of the bed 6"
- Chew gum

UC

Stress reduction may be helpful

Risks/Cautions Associated with UC

UC is associated with specific intestinal and "extraintestinal" complications. These include:

- Massive hemorrhage (in up to 3% of all individuals with UC) – requires emergency surgery
- Fulminant colitis (in up to 15% of all individuals with UC) – carries with it the risk of perforation and death
- Stricture in the colon (in about 10% of all individuals with UC) and may cause symptoms of obstruction
- Colon cancer
- Eye involvement
- Skin disorders
- Arthritis
- Sclerosing cholangitis
- Lung disease
- Thromboembolism
- Autoimmune hemolytic anemia

Case

Note that this case has been deliberately abbreviated and information omitted. You will have to supply some of the missing information in the assignments! Also note that this case occurred prior to published studies on licorice and preterm birth.

Initial Visit 8/03 -- 13 weeks pregnant

Identification/Chief complaint: Ulcerative colitis – moderate – in a pregnant woman at 13 weeks gestation. Client is a 26 yo woman with a history of ulcerative colitis for which she has been taking Asacol and Prednisone but wants to discontinue it due to concerns over safety during pregnancy.

History of Present Illness: Diagnosed with UC 2 years ago. Currently has some diarrhea daily and hemorrhoids. Also has a recurrent vulvovagnitis. Her gastroenterologist is supportive of her discontinuing the medication during the pregnancy as long as she can control her symptoms sufficiently and maintain appropriate weight gain. Currently also reporting severe seasonal allergies – rhinitis, water, itchy eyes.

Past medical history:

Ulcerative colitis

Migraine headaches since age 19; takes Tylenol, rests

Hemorrhoids

UTI x 3

Allergies: Seasonal; no known drug allergies (NKDA)

Medications: Asacol, Folic acid and multivitamin

Psychiatric history: none

Gynecologic history: Menarche age 13, cycle every 35 +/- 5 days, 3-4 days mild-moderate bleeding; occasional Tylenol for cramps, 1 miscarriage, 1 non-complicated homebirth at 37.5 weeks gestation

Family history: diabetes, alcohol abuse

Review of systems: Nausea, dizziness (mild), low backache, mild vaginal spotting x 2 days, abdominal cramping – irregular, fatigue, intestinal gas, slight edema in hands

Social history: married for 5 years, has a 3 yo daughter; stay-at-home mom and artist. Tobacco exposure at work, soda daily.

Diet: Very picky diet with a strong reliance on packaged foods. Refuses most protein and vegetable foods. Will eat some red meat and poultry, and limited fruit. Does not eat whole grains. Sort of a health food version of SAD (standard American diet).

Sample one-day diet diary:

Breakfast: 1 boost bar, milk, 4 chicken nuggets (organic)

Lunch: chips, ½ of a "hoagie," Ginger Ale

Snack: cake

Dinner: chicken breast, ramen noodles, 2 small strawberry muffins

Snack: ice cream

Physical Exam:

Wt 124 pounds, Pulse 88, BP 108/68. Fetal heart tones (FHT) 136 bpm with Doppler, fundus non-palpable abdominally

Labs/ Data:

Trace of ketones in the urine, no blood in urine

Blood work pending visit to GI doc

Assessment and Plan

- Gave standard herbal suppository protocol for RWC and dietary recommendations, though client not enthusiastic or optimistic about making dietary changes. Husband said he will encourage her and prepare some of the foods.
- Discussed desire to come off of meds and agree to work with her on using herbs as appropriate to control symptoms. Client agrees that the baby's health must be kept a priority and that weight gain is essential. Her current weight is 124, her pre-pregnant weight is 120, and she is just under 5'4" height. An 18-pound weight gain is our goal. If there is significant weight loss we will need to reconsider the plan, and she will need to continue to see her GI doc.
- Freeze-dried nettles 2 caps twice daily plus 1000 mg Vit C daily for allergies. Continue throughout season daily.

9/03 -- 17 weeks pregnancy

Physical exam Wt 125 #, normal

Labs:

Urine trace leukocytes

WBCs 11.5

Hct 40.0/ Hb 13.7, otherwise normal (Rh positive)

Assessment and Plan

- No allergy symptoms, still taking nettles and Vit C
- Still reporting vulvovaginitis. Did the suppository intermittently. Took Flagyl she had from a previous infection but it actually made her feel worse. We discussed diet and need to decrease sugar, and need for staying with the vaginal suppository for 2 weeks. Also, I added a peri-rinse which I think is especially important in her case and she agreed to prepare it and use it 3 times/day and after bowel movements; she might need to continue this throughout her pregnancy.
- Has gone off medication (weaned over past month with GI doc) and is now noticing increased episodes of diarrhea (5-6 times/day) and her hemorrhoids are troublesome.
- Digestive system soother: ½ cup marshmallow, licorice, ginger, and spearmint to be taken twice daily as a tea or 2 capsules twice daily.
- Also added an herbal formula of the following for gas and damp heat (vaginitis) in addition to current protocol:

Scutellaria	9 gm
Peony	6 gm
Licorice	6 gm
Jujube	12 pieces
Ginger root	6 gm
Atractylodes	9 gm

Six capsules of granulated tea to be taken daily for 2 weeks.

Also recommended daily good quality yogurt or a probiotic.

10/03 — 22 weeks gestation

Physical exam: significant wt gain since discontinuing the medications – 138 #; singletone pregnancy, no edema. Fundal height 22 cm and FHT 148.

Reports diarrhea 2-4 times daily, not too problematic. Increased tea to 1 cup twice daily. Using tea bags for hemorrhoids as needed (read about in *The Natural Pregnancy Book* after our last visit) and finding helpful – the hemorrhoids aren't too bad at all. Minimal blood in stool, not passing mucus or "tissue." Still occasionally noticing vulvar and vaginal itching but using peri-rinse and much less troublesome than before.

11/03 — 26 weeks gestation

Physical exam: Wt 138# and feeling well. Fundal height 29 cm.

Ran out of herbs last week, and diarrhea and some bleeding picked up after a couple of days. No vaginitis – still using peri-rinse a couple of times each day. Refilled marshmallow, etc. Not taking TCM formula anymore. No problems with gas. Still a very picky eater! Up to ½ ounce licorice root daily.

1/04 — 34 weeks gestation

UC has been flaring for a couple of weeks now. Up to 142 pounds but no weight gain in 6 weeks. Diarrhea suddenly 6-8 times/day with bleeding and what appears to be chunks of mucus and tissue. Sent to GI doc. I cannot go any higher on the licorice in pregnancy due to safety issue. So will need to go on Prednisone again to control.

1/04— 35 weeks gestation

Back on Asacol and Prednisone high dose to control UC before labor, especially since she went early with previous pregnancy. Client feels okay about this choice as she feels she limited the medication exposure as much as possible during the pregnancy.

1/04— 36 weeks gestation

142 pounds, Fundal height 36.5, baby head down, and diarrhea and bleeding mild, down to 2-3 times per day and only some slight blood on toilet tissue. Hemorrhoids visible at anus but not significant in size. Feeling fatigued. Hb 12.5

Labor began at 36.5 weeks and a healthy baby was born at home. Note that this is technically a preterm labor and she was taking licorice, but her first baby was also born at close to this time, and she had not been taking licorice during that pregnancy.

HERBAL MEDICINE FOR WOMEN

Unit 3 Lesson 35

Premature Labor and Uterine Irritability

Learning Objectives

By the end of this lesson you will be able to:

1. Recognize the signs and symptoms of preterm labor
2. Define uterine irritability
3. Understand the risks of preterm labor and limitations of botanical approaches
4. List and describe the characteristics of the most common botanical treatments for uterine irritability and preterm labor as presented in this lesson and the associated required reading.

Unit 3 Lesson 35 Premature Labor & Uterine Irritability

Required Reading

Botanical Medicine for Women's Health, 2nd edition (Romm)

- Preterm Labor and Uterine Irritability, pp 396-397

Recommended Reading

Obstetrics and Gynecology at a Glance (Norwitz and Schorge)

- Preterm Labor and Uterine Irritability, pp 396-397

Key Terms

Be sure to familiarize yourself with the definitions for all key terms. These can be found in the course resources or using an on-line medical dictionary.

Premature labor

Preterm labor (PTL)

PROM/ PPROM

Tocolytic

Uterine irritability

Key Botanicals for this Lesson

Students should be familiar with the botanical name, common name, actions, common uses, forms of use, general dosage ranges, side effects, and contraindications of the herbs in the following list. Ideally, you will also be familiar with taste. This information can generally be found in the course and accompanying required reading materials.

Actaea racemosa

Dioscorea villosa

Viburnum opulus

Viburnum prunifolium

Vitex agnus castus

Introduction

Preterm labor is defined as labor occurring prior to the end of the 37th pregnancy week. It is one of the leading causes of infant mortality and also long-term disability in the United States. Factors that contribute to premature labor include age, socioeconomic status (SES), stress, infection, hemorrhage, and amount of stretch tension on the uterus. However, risk factors predict only 50% of preterm births.

Specific factors that may increase the risk of premature labor

- Alcohol intake
- Cervical insufficiency
- Cigarette smoking
- Closely spaced pregnancies
- Clotting disorders (thrombophilia)
- Concurrent obstetric or medical complications
- Dehydration
- Diabetes
- Domestic violence
- Drug use
- Emotional abuse
- Fetal congenital abnormalities
- History of second trimester pregnancy loss
- Hypertension
- Jobs that require long periods of standing
- Loop electrosurgical excision procedure (LEEP)
- Malnutrition
- Multiple gestation
- Preterm premature rupture of the membranes
- Prior preterm birth
- Sexually transmitted infections
- Urinary tract infections
- Uterine abnormalities
- Uteroplacental insufficiency
- Vaginal infection

Unit 3 Lesson 35 Premature Labor & Uterine Irritability

Key Signs/Symptoms

- Abdominal pain
- Cervical dilatation
- Low backache
- Fetal part protruding through cervix
- Uterine contractions (regular or irregular)
- Vaginal bleeding

Diagnostic Findings

A firm diagnosis of premature labor is based on a combination of uterine contractions and cervical change or a cervix dilated to greater or equal to 2 cm and/or 80% effacement in a woman who has never before given birth (nulliparous). Other findings might include regular uterine contractions and shortening cervical length. Fetal fibronectin (fFN) is used for its negative predictive value.

Conventional Treatment

Treatment of confirmed preterm labor includes:

- Identification and treatment of an underlying cause
- Pharmacologic management:
  - Tocolytics are given when appropriate and have been shown to delay delivery for only 48 hours in most cases and may have adverse consequences (with the exception of nifedipine, a calcium channel blocker, which may be used long-term with benefit)
  - High-risk patients may benefit from progesterone supplementation

NOTE: Tocolytics – whether pharmaceutical or botanical – are contraindicated when there is fetal distress, intrauterine infection, vaginal bleeding, and intrauterine fetal death.

Botanical Treatment Strategies

There are several possible scenarios for which an herbalist might be consulted about premature labor: prevention of PTL when there is a past history but no current symptoms; quieting contractions when there is threatened PTL without cervical change; and treatment of active PTL. While the first 2 scenarios provide some latitude in the use of herbs to prevent PTL from progressing, a woman in premature labor seeking herbal support presents a very complex situation. There are very limited effective pharmaceutical/medical treatments, yet the risks of prematurity to the baby necessitate hospital birth. The herbalist consulting in cases of preterm labor, therefore, must do so in a manner that does not compromise a woman's timely hospital admission by encouraging the use of herbs at home to forestall labor if preterm birth seems to be progressing.

The herbal treatment of PTL focuses on several facets:

- addressing underlying causes/risk factors
- ruling out contraindications to tocolyis
- tocolytic botanical therapies if appropriate

As with conventional therapies, little can be done to arrest preterm birth once PTL is actively underway, though contractions may be forestalled for a short duration. Therefore, focusing on underlying causes and prevention of PTL are more advantageous strategies. Students should refer to relevant lessons in the course and textbook chapters for botanical protocols.

Active labor must be ruled out by a qualified obstetric care provider and the situation carefully and appropriately monitored. Uterine antispasmodic herbs, particularly cramp bark and black haw are discussed in the lesson and chapter on miscarriage, as well as in the plant profiles of the course and textbook. Repeated doses every 15 minutes with 2-3 mL of these herbs over a 2-3 hour period should yield demonstrable results (note, they may have hyoptensive effects on the mother) and can bring relief in uterine irritability. Other herbs that may be combined with the aforementioned to create an additive musculoskeletal relaxant effect include wild yam, black cohosh, Jamaican dogwood *(Piscidea piscipula),* and lobelia *(Lobelia inflata)*. The latter two herbs are considered appropriate for acute use only during pregnancy; long-term effects are unknown and possibly unsafe. However, no adverse effects are expected from acute use over a few hours time within recommended doses (Jamaican dogwood up to 2 mL every 30 minutes for 2 hours; black cohosh up to 3 mL every 30 minutes for 2 hours, combined with an equal amount of either cramp bark or black haw at each dose). These herbs are not recommended for use during the first trimester, and should not be used for more than 3 consecutive days as described above. Midwives may also recommend warm baths to which have been added 5-7 drops of lavender oil for relaxation, visualization, and other mind-body techniques for stress reduction. Bathing is contraindicated if there has been ROM.

Emotional support of the mother is so important. Herbs for anxiety may be given short term in small doses if necessary. Nervine relaxants include: *Lavendula officinalis* (lavender), *Melissa officinalis* (lemon balm), *Matricaria recutita* (chamomile), and *Passiflora incarnata* (passion flower). Remember, motherwort may increase uterine contractility, so this is not a time to use it; similarly cannabis should be avoided for this reason as well as due to possible political/legal consequences for the mother should she have a positive urine test.

Premature labor can progress to birth quickly, thus these herbs should not be relied on if premature labor is occurring unless in an appropriate medical setting and in conjunction with medical observation and care. More frequent dosing of the above herbs may be appropriate with proper monitoring of fetal heart rate and maternal vital statistics and liver enzymes in the case of black cohosh, however, no studies have been conducted to examine the safety or efficacy of botanical treatments to arrest premature labor contractions.

Cramp bark, black haw, and wild yam are appropriate for chronic use in pregnancy, and may be helpful in managing uterine irritability. Chaste berry might be considered for women with a history of preterm labor or other high risk factors, considering the use of progesterone for PTL prevention in women with a history of PTL from undetermined causes and the possible indirect progestrogenic effects of chaste tree. This is a theoretical application, and would possibly need to be started prior to or early in pregnancy. It would not be expected to have efficacy used short term or acutely.

Additional Treatment

- Bed rest and fluids are commonly recommended but there is no evidence to prove effectiveness.
- Adequate hydration is important if there is dehydration
- Pelvic rest is advisable

Risks/Cautions

- Tocolytics – whether pharmaceutical or botanical – are absolutely contraindicated when there is fetal distress, intrauterine infection, vaginal bleeding, and intrauterine fetal death.
- PTL symptoms can quickly progress to preterm birth. Premies, particularly under 35 weeks, often require immediate medical care.

HERBAL MEDICINE FOR WOMEN

Unit 3 Lesson 36

Skin Changes and Varicosities in Pregnancy

Learning Objectives

By the end of this lesson you will be able to:

1. Recognize common, benign dermatologic conditions occurring in pregnancy
2. Recognize the need for referral for diagnosis of skin conditions that occur in pregnancy to rule out underlying illness
3. Understand the etiology of vascular changes leading to varicosities in pregnancy
4. List and describe the characteristics of the most common botanical treatments for varicose veins in pregnancy as presented in this lesson and the required reading
5. List and describe the characteristics of the most common botanical treatments for skin conditions occurring in pregnancy as presented in this lesson and the required reading

Unit 3 Lesson 36 Skin Changes & Varicosities in Pregnancy

Required Reading

Botanical Medicine for Women's Health, 2nd edition (Romm)

- Pruritic Urticarial Papules and Plaques of Pregnancy
- Varicosities in Pregnancy
- [Revisit] The Actions of Herbs pp 30-45; Botanical Preparation Forms pp 52-62

Review relevant herb monographs from Key Botanicals list below

Key Terms

Be sure to familiarize yourself with the definitions for all key terms. These can be found in the course resources or using an on-line medical dictionary.

Cholestasis

Eczema

Erythema multiforme

Estrogen

Pemphigoid gestations

Progesterone

Pruritic urticarial papules and plaques of pregnancy (PUPPP)

Pruritis

Striae gravidarum

Varicose veins

Key Botanicals for this Lesson

Students should be familiar with the botanical name, common name, actions, common uses, forms of use, general dosage ranges, side effects, and contraindications of the herbs in the following list. Ideally, you will also be familiar with taste. This information can generally be found in the course and accompanying required reading materials.

Aesculus hippocastanum

Aloe vera

Arnica montana

Avena sativa

Camellia sinensis

Centella asiatica

Eschscholtzia california

Ganoderma lucidum

Glycyrrhiza glabra

Hamamelis virginiana

Matricaria recutita

Passiflora incarnata

Quercus alba

Rumex crispus

Schisandra chinensis

Scutellaria baicalensis

Taraxacum officinale

Urtica dioica

Vaccinium myrtyllus

Withania somnifera

Unit 3 Lesson 36 Skin Changes & Varicosities in Pregnancy

Introduction

As if the monumental change of becoming a mother isn't enough to adjust to, many pregnant women find themselves facing or trying to prevent some of the natural consequences pregnancy can have on the female body – stretch marks, varicosities, itching, etc. Some of these changes are simply a function of the enormous work the body is doing, for example, itching as a result of increased processing and elimination of extra hormones by the liver, or varicosities as a result of the effects of hormones on the vasculature. Some symptoms may be preventable with optimal diet, exercise, and other lifestyle habits, for example, hemorrhoids avoided by avoiding constipation, as discussed in a previous lesson. Finally, some problems can arise uniquely in pregnancy, for example, PUPPP, while others may be exacerbated by pregnancy. Some of these are entirely benign, while others, for example, herpes infection, can cause serious problems for the mother and her baby.

This lesson does not aim to make you an herbal dermatologist, nor does it suppose that you will learn about or be able to recognize all of the skin problems of pregnancy presented herein. The goal is for you to recognize that there are common skin changes and problems that occur in pregnancy, some of which can be improved or relieved using herbs, and that there are also some serious medical problems that can arise in pregnancy with skin manifestations, so you should know that a medical diagnosis and care are almost always required initially. You will learn which skin herbs can be used safely in pregnancy, and which require caution or should not be used. You will also learn about vascular changes in pregnancy, how these lead to varicosities, and a few herbal tools for their prevention and treatment.

Varicose Veins

Hormonal changes of pregnancy cause blood vessel dilatation and proliferation. Combined with increased blood volume and venous pressure, this can lead to vascular spiders (occurring in 66% of white women, 11% of black women) starting in approximately the 2nd to 5th months of pregnancy; leg, vulvar, and anal varicosities (the latter called hemorrhoids), and even increased ruddiness in the palms of the hands, called palmar erythema.

Common Skin Concerns

Stretch marks, which begin as pink or purplish "lines" beginning in the third trimester of pregnancy, most commonly on the lower abdomen, breasts, and thighs, eventually progress into linear crevices with fine wrinkles and decreased skin pigmentations giving them a silvery, papery look. They are a permanent skin change, though they do fade in the postpartum and over time. Family history of striae and a large weight gain in pregnancy are contributing factors.

Pruritus, or general itching, can occur in completely healthy pregnant women and occurs in about 20% without any underlying disease, mainly in the 3rd trimester. The scalp, abdomen, vulva, and, anus (this latter may be due to hemorrhoids) are the most common itchy sites.

Skin Related Diseases of Pregnancy

There are several skin conditions that either arise in pregnancy or are worsened in pregnancy. With the exception of PUPPP and cholestasis, you are unlikely to see these in clinical practice, and even the latter two are relatively uncommon for the herbalist to see. Management requires medical assessment in all cases; herbs may also be used for symptomatic relief, and, reduction of inflammation and as an alternative to steroids when the case is mild to moderate. The following are two representative skin conditions – PUPPP poses little risk to mother or fetus, though can be intolerably uncomfortable; *pemphigus gestationis* is sometimes mistaken for PUPPP but can have serious health consequences to the fetus. Other skin conditions, such as cholestasis, which is actually a liver condition, and prurigo, are not discussed here. Prurigo may be treated similarly to these other skin conditions. Cholestasis is much more complicated and requires medical care for the underlying liver dysfunction.

- *Pemphigus gestationis*: A blistering herpetic disease of pregnancy that is associated with increased risk to the pregnancy and the fetus. There may be itching prior to the appearance of hive-like lesions, which typically occur in the 2nd or 3rd trimester, and eventually form large blisters. It often resolves prior to birth and in most cases spontaneously resolves in the months after birth. It often returns with increasing severity in successive pregnancies. It is diagnosed with a skin biopsy and immunofloresence. It mimics PUPPP. An important distinguishing feature is that PUPPP usually starts in the stretch marks, whereas this is often around the umbilicus. The palms and soles may be affected as well. Symptomatic relief with topical steroids is usually the treatment, and oral antihistamines are also sometimes used. Oral steroids are used as symptoms cannot otherwise be controlled. The disease can cause growth restricted fetuses and prematurity due to placental insufficiency. The newborn may have a mild case of the disease, but this will usually clear up on its own without complications. Medical management is required, though botanicals may be used for symptom relief in conjunction with ongoing obstetric assessment of fetal status.

- *Pruritic Urticarial Papules and Plaques of Pregnancy* [also called polymorphic eruption of pregnancy (PEP) in the UK]: The most common pregnancy skin condition, occurring in 1/160 to 1/300 pregnancies, it is about 10 times more common with multiple gestations (twins, triplets, etc) likely due to either increased abdominal stretching or increased hormone levels over singleton pregnancies. The condition poses no risk to the mother or the fetus. PUPPP appears as reddish, swollen papules in the abdominal stretch marks, sparing the area around the umbilicus (contrast with *pemphigous gestationis*), later spreading to the extremities where they join together to form plaques of hives that appear to have white "rings" around them or a target appearance. The faces, palms, and soles are rarely affected. The onset is usually in the 3rd trimester, but it can also start in the postpartum. Rarely does it occur earlier than the 3rd trimester. The itching can be quite terrible and distressing, and may actually worsen immediately after birth, but usually resolves by just over 2 weeks postpartum. Diagnosis is usually made clinically. A differential diagnosis should be made by a physician to rule out erythema multiforme, a condition that can arise due to a medication or drug reaction.

Conventional Treatment

Conventional treatment of leg varicosities is supportive, and includes leg elevation, compression with support hose, sleeping on the left side, exercise, and avoidance of long periods of standing or sitting. Vulvar varicosities are more difficult to treat, and sometimes require surgical intervention.

Treatment of prurities is for symptomatic relief, and includes oatmeal baths, topical steroids, antihistamines, and/or ultraviolet light (UVB). Oral steroids are used in severe cases where symptomatic relief cannot be achieved with these other measures.

Botanical Treatment Strategies

Herbs may be used topically quite safely during pregnancy for the symptomatic relief of itching and inflammation, without concern to the mother or embryo/fetus. Internally, some herbs may be used with impunity, while others are reserved for severe itching and eruptions as an alternative to steroid treatment in women wishing to avoid their use. Venotonic herbs are used for the treatment of varicosities. Most of these herbs are not studied for efficacy or safety in pregnancy. Discussions of these herbs can be found in *Botanical Medicine for Women's Health* (Romm).

- Adaptogen
- Antihistaminic
- Anti-inflammatory
- Aperients
- Astringent
- Hemostatic
- Hepatic Alternatives/Venotonic

Stretch Marks

In one randomized trial, a cream containing gotu kola extract, vitamin E (alpha tocopherol) and collagen-elastin hydrolysates appeared to prevent stretch marks in women prone to this problem. Cocoa butter alone was not effective in preventing stretch marks in another study. Internal use of gotu kola is not considered appropriate in pregnancy; topical use has resulted in contact dermatitis, so it is best to try a small test area before broadly applying.

Varicosities

In addition to supportive therapies (proper stockings, positioning, etc.), one might include venotonic herbs in a protocol to prevent (in women with a history or family history of varicosities) or treat varicose veins of the legs or vulva (though these are decidedly harder to treat). Both topical and internal preparations are used. Topical applications of astringent, toning herbs, for example, witch hazel, horse chestnut, and arnica are commonly used to reduce inflammation and tighten the tissue. Internally, nettles, horse chestnut, and bilberry are the best options. Horse chestnut is typically taken as a tincture. The other two herbs can be taken in tincture, as teas, and as foods. Foods high in rutin and bioflavonoids, for example, buckwheat and all kinds of peppers should be an important part of the diet.

Pruritic, Inflammatory Skin Conditions

Here the goal is to relieve itching, swelling, and inflammation using herbs that address those symptoms. Additionally, if the symptoms are causing irritability or sleep difficulties, nerviness and gentle sedative herbs might also be included as part of a protocol.

Case

Consider the following case and see the Assignment section for questions and formulations.

Identification/Chief concern: Unbearable itching on the abdomen and inner thighs. The itching lasts all day and is worst at night, causing restlessness and poor sleep.

History of Present Illness: Katya is a 32-year old Caucasian woman pregnant with twins. This is her second pregnancy. Her first was relatively uneventful other than the normal concerns of pregnancy, including developing stretch marks, mostly on her lower abdomen. She is currently 34 weeks pregnant and was diagnosed with PUPPP last week after noticing itching that became increasingly worse and developed into welt-like raised areas that have now blended together into large, inflamed areas. She is scratching a lot, even in her sleep, and now also has some excoriated, red, burning tissue. She is concerned about getting an infection from the scratching, and mostly is in a lot of discomfort that is affecting the quality of her pregnancy and making it hard to her to take care of her toddler.

Her OB recommended a topical steroid and an antihistamine to help with the itching and to help her sleep. Even though her physician assured her that these mediations are safe during pregnancy, she is not happy about using these drugs and so her OB referred her to you for any insights you might have about herbs she can use. She is otherwise in good health and the pregnancy is following a normal course. Her OB assured her that this condition was likely to clear up after the birth, and that because she is carrying twins she might birth a little early, but she is "going out of her mind" from the itching.

HERBAL MEDICINE FOR WOMEN

Unit 3 Lesson 37

Insomnia, Depression, and Anxiety During Pregnancy

Learning Objectives

By the end of this lesson you will be able to:

1. Recognize signs of insomnia, depression, and anxiety in pregnancy, including common symptoms
2. Recognize the need for medical referral to rule out underlying disorders for insomnia, depression, and anxiety during pregnancy
3. Recognize the need for medical referral to rule out and treat moderate to severe depression and anxiety in pregnancy
4. List and describe the characteristics of the most common botanical treatments for insomnia, anxiety, and depression in pregnancy as presented in this lesson and related reading in the course

Unit 3 Lesson 37 Insomnia, Depression, & Anxiety

Required Reading

Botanical Medicine for Women's Health, 2nd edition (Romm)

- Insomnia in Pregnancy, pp 419-423

Articles/podcasts:

- Natural Approaches to Depression in Pregnancy https://avivaromm.com/depression-in-pregnancy/
- Antidepressants During Pregnancy: What's a Mom to Do? https://avivaromm.com/depression-pregnancy-take-medications/

Key Terms

Be sure to familiarize yourself with the definitions for all key terms. These can be found in the course resources or using an on-line medical dictionary.

Antidepressant

Anxiolytic

Hypoglycemia

Restless Legs Syndrome (RLS)

SSRI

Key Botanicals for this Lesson

Students should be familiar with the botanical name, common name, actions, common uses, forms of use, general dosage ranges, side effects, and contraindications of the herbs in the following list. Ideally, you will also be familiar with taste. This information can generally be found in the course and accompanying required reading materials.

Avena sativa

Eschscholtzia californica

Hypericum perfoliatum

Lavendula officinalis

Leonorus cardiaca

Matricaria recutita

Melissa officinalis

Passiflora incarnata

Scutellaria lateriflora

Valeriana officinalis

Viburnum opulus/Viburnum prunifolium

Withania somnifera

Zizyphus spinosa

Introduction

Insomnia is a common symptom of pregnancy, both due to physiologic and hormonal changes that naturally occur in pregnancy, and secondary to anxiety, and depression, both of which have become increasingly common – and better studied in pregnancy – in the past decade Postpartum depression is covered in depth later in Unit 3, general depression is covered in Unit 4, and insomnia is presented more generally and extensively in Unit 4.

While not all of the botanicals and supplements mentioned in these other sections are appropriate for use in pregnancy, many are, and offer safer options than conventional therapies for sleep, and the content in both Botanical Medicine for Women Health (textbook) and the articles/podcasts accompanying this lesson, provide options that can be confidently used in both prenatal depression and anxiety. However, it's important for the health of mom and baby that mom receive appropriate counseling – and when needed, medication, for the treatment of these conditions. You'll learn more about the importance of this in the adjunct reading/audio materials.

Insomnia in pregnancy is typically a function of the growing belly causing physical discomforts that affect sleep, for example, the frequent need to urinate, muscle aches, inability to sleep in usually comfortable positions, or heartburn. Low blood sugar may cause a woman to wake in the night and unless she realizes this and eats something, she may have trouble falling back to sleep. Further, worries about the pregnancy, birth, motherhood, or other concerns may prevent sleep or may keep her awake if she wakes for another reason. Restless legs syndrome is a not uncommon symptom that causes sleep disturbance. Magnesium, iron, and folic acid deficiencies are the most common causes of RLS. Rarely, an undetected underlying cause, such as hyperthyroidism, might be a cause of insomnia in a pregnant woman. Usually this would be accompanied by additional symptoms. In TCM, blood and yin deficiency affect the sleep by causing Shen (mind/heart/spirit) disturbance, and is treated with specific herbal formulae described below.

The magnitude of hormonal and emotional changes that occur in a relatively short period of time (ten lunar months) may cause pregnant women to experience anxiety, and even depression. Pre-existing problems may also persist or be exacerbated, and underlying discomforts or poor sleep can aggravate emotional lability. While many expect pregnancy to be a time of emotional joy and high positive expectations for women, it is actually a time of increased susceptibility to psychiatric illness, including major depression — both new and relapsing. This risk is increased for women who decide to lessen or discontinue taking medications that have been controlling their symptoms. Unfortunately, depression is commonly overlooked by medical care providers — including midwives — and even when recognized, it is commonly undertreated.

Depression during pregnancy can affect the health, safety, and quality of life of the mother and her family. It is essential that she receive proper attention, support, and care. Herbal care should only be for mild to moderate depression, and should always occur in conjunction with the woman's primary care providers. Depression and anxiety during pregnancy often persist into the postpartum, and sleep deprivation during pregnancy is not likely to improve once a woman is involved in the full time care of her newborn. Many women are reluctant to use conventional antidepressant and anti-anxiety medications during pregnancy, and the evidence on their safety appears mixed. Thus, a medicine bundle of safe herbal treatments is a useful tool to be able to share with pregnant women and those who provide care for them. It is also important for the herbal educator to recognize the limits of herbal care for women with severe depression or anxiety, as well as to recognize the health and

safety implications of chronic sleep deprivation in women with severe insomnia. Depression can be a sign of an underlying thyroid problem or other medical disorder; anxiety likewise can suggest a medical problem from a pulmonary embolism if the onset is sudden, to hyperthyroidism. Therefore, a medical evaluation is necessary to rule out underlying problems.

Some amount of anxiety or apprehension about the unknown, about motherhood, the well-being of the baby, finances, and related issues is common and normal in pregnancy. Excessive anxiety and related anxiety disorders (i.e., obsessive-compulsive disorder) are not normal in pregnancy; should these be present or develop, appropriate medical/psychiatric care is required.

This lesson is a brief overview of those herbs safe for use in pregnancy for insomnia, mild to moderate depression, and mild pregnancy-related anxiety, and how to choose amongst them. You will be able to pull all of the information in this lesson together clinically more effectively at the end of this course having gone through the remainder of Unit 3, and also Unit 4 where insomnia, depression and anxiety are covered more generally.

Lemon Balm *(Melissa officinalis)*

Key Symptoms

Insomnia:

- Difficulty falling asleep
- Inability to go back to sleep after waking
- Waking too early
- Irritability
- Fatigue

Anxiety (typical pregnancy type):

- Worries about baby, birth, self, partner, other children, finances, etc.
- Overprotective behaviors to immediate loved ones
- Poor sleep
- Poor appetite

Depression:

- Anxiety

Valerian *(Valeriana officinalis)*

- Impaired judgment affecting prenatal self-care and obtaining prenatal care
- Impaired bonding with the baby at birth
- Insomnia
- Poor appetite and poor weight gain
- Postpartum depression
- Suicidal ideation and suicide (low suicide risk in pregnancy)
- Tobacco, alcohol, and drug use
- Psychotic if severe

Diagnostic Findings

These are largely clinical diagnoses; the diagnosis of depression is often made using a depression rating scale. A rating scale predictive for postpartum depression should be administered in pregnancy to any woman with a history of depression.

Conventional Treatment

- Psychotherapy
- Pharmaceuticals
  - SSRI's generally thought to be safe during pregnancy, however, this is controversial (See Postpartum Depression)
- Sleep hygiene
- Sleep aids

Botanical Treatment Strategies

It is recommended that one not mix antidepressant and anti-anxiety herbs or supplements medications with pharmaceutical antidepressants. Similarly, it is not advisable to mix botanical and conventional sleep medications. However, gentle nervine teas, for example, chamomile, lemon balm, and lavender, in moderation, are not contraindicated for use with pharmaceutical medications.

Additional Treatment

See the related chapters of *Botanical Medicine for Women's Health*, including Postpartum Depression, Depression, Anxiety, and Insomnia for additional therapies to use in conjunction with botanicals.

Questions to Ask

- Ideally, you'll have your client fill out a standardized prenatal depression/anxiety scale for example, the Edinburgh Postnatal Depression Screening Tool (also used for prenatal depression) or the Beck Depression Inventory – both widely available online. Women who score positive for depression should be referred for appropriate medical support and treatment
- Directly ask if a woman is having thoughts of harming herself. This must be asked even if awkward. While it may seem beyond the scope of practice of the herbalist/herbal educator to ask this question, you may be the only one who does. An affirmative answer requires referral for immediate medical evaluation.
- Ask about any symptoms that are accompanying the main complaint – you might uncover symptoms that could be associated with an underlying condition, for example, hypo- or hyperthyroid.

Risks/Cautions

The primary concerns are the risk of leaving an underlying condition untreated and the risks associated with poorly treated depression and anxiety disorders.

Case 1: Part 1

Note: This case is being introduced in this lesson. Part 2 is presented later in this unit in the Postpartum Care, Breastfeeding Problems, and Postnatal Depression lessons.

Identification/Chief concern: Severe anxiety about developing postpartum depression.

History of Present Illness: Anne is 39 year-old successful art designer who began her prenatal care with a midwife when she was 9 weeks pregnant with her second child. She had postponed this second pregnancy for 6 years largely out of fear of re-experiencing the postpartum depression that had debilitated her after the birth of her first child. Her first pregnancy had been uneventful, though she reported losing a large amount of blood at birth and having to go to the hospital, at which time her midwife refused to go because of legal issues in that state. Her husband was told to drive her to the hospital where she received a transfusion.

Anne felt terribly abandoned by her midwife. In the weeks and months of postpartum she reported symptoms of depression to her midwife, but these were dismissed as normal for the adjustment to motherhood. She tried St. John's wort with no noticeable improvement.

At one year postpartum the symptoms became severe, with suicidal thoughts. She had gained a significant amount of weight over her prenatal and pregnancy weights which added to her depression, and she was experiencing serious marital discord, so she sought the help of a psychiatrist. Anne spent over a year trying different prescription medications singly and in combinations. Finally, with a combination of three antidepressant drugs and a synthetic form of T3 hormone, she was symptom-free and remained so for several years.

With the help of a prenatal psychiatry specialist she was able to eventually wean off of the drugs, including the thyroid medication, and she became pregnant. She remained on a single antidepressant medication for the first couple of weeks of pregnancy and then discontinued this as well. She did not like the idea of being on pharmaceuticals at all, as this did not fit with her "natural philosophies" about medicine, and felt entirely uncomfortable using the drugs during pregnancy.

Upon beginning her relationship with a new midwife for this pregnancy, she had a tremendous amount of anxiety about the potential for repeated PPD.

Past medical history: depression, hypothyroid

Family history: non-contributory

Social history: married for 15 years, successful professional, supportive social network; no history of smoking, drinking, or drug use

Psychiatric history: severe postpartum depression that persisted for > 1 yr.

Gynecologic history: G2P1, menarche age 12, every 28 days lasting 5-6 days, moderate flow

Review of systems: mild constipation; recurrent migraines 1x/week, severe generalized pruritis, anxiety

Physical Exam: normal exam with mild skin irritation from scratching but no signs of rash or infection

Labs/ Data: Hb 12.4, Hct. 37, TSH and T4 within normal limits

She was given the following protocols:

- For migraine headache: Increase daily water intake throughout pregnancy. Increase protein to 80 gm/day. Take 400 mg Riboflavin (Vit B2) daily. Do a 1 months headache and migraine journal and identify/avoid triggers. Apply lavender or peppermint oil to the temples daily, 1 drop neet or a few drops diluted and apply a daub with your fingers.

Headache blend for acute symptoms:

Scutellaria lateriflora	30 mL
Passiflora incarnata	30 mL
Viburnum opulus	30 mL
Lavendula officinalis	10 mL

Take 1-2 mL up to 6 mL daily, for up to 2 consecutive days only for symptom relief.

- As caffeine also improved her symptoms once a headache began, instructions including taking ¼ - ½ cup of coffee if a headache begins. Otherwise, avoid caffeine.
- For constipation: Eat adequate fruits, vegetables, and proteins Decrease sugar intake; decrease simple carbohydrate intake
- For itching skin: topical emollient salve with marshmallow root and calendula. If it persists, the following tincture can be added to your protocol. Use equal parts of

Taraxacum officinale
Rumex crispus
Arctium lappa
Echinacea angustifolia

Take 2 mL TID

After 2 weeks on the formula Anne reported a complete absence of headaches and significantly decreased itching. She used up the products and did not refill them for several days, during which time she had a headache and the itching increased again. She refilled her formulas and had only 1 severe headache for the remainder of the pregnancy, when her grandmother died.

• For anxiety: Intensive supportive counseling and reassurance that she would not be abandoned in the postpartum period relieved Ann's anxiety tremendously during pregnacny. Some baseline anxiety remained and persisted until she realized in the postpartum period that she was not going to be abandoned and that her depression was effectively managed.

HERBAL MEDICINE FOR WOMEN

Unit 3 Lesson 38

Breech Presentation

Learning Objectives

At the end of this lesson students should be able to:

1. Recognize the classification of breech presentation
2. Understand the implications of breech presentation on birth outcome
3. Be able to apply moxibustion as described in this lesson

Unit 3 Lesson 38 Breech Presentation

Required Reading

Botanical Medicine for Women's Health, 2nd edition (Romm)

- Breech Presentation and Version, pp 423-426

Recommended Reading

- Breech Presentation and Version, Obstetrics and Gynecology at a Glance (Norwitz and Schorge)
- Coyle ME, Smith CA, Peat B. Cephalic version by moxibustion for breech presentation. Cochrane Database Syst Rev. 2012 May 16;(5):CD003928.
- Cardini F, Weixin H. Moxibustion for correction of breech presentation: a randomized controlled trial.. JAMA. 1998 Nov 11;280(18):1580-4.
- Framework for safe acupuncture practice when treating: Breech & Transverse/Oblique/Unstable Lie
- Acupuncture and Acupressure for Pregnancy and Childbirth

Optional Supplies

- 1 moxa stick (purchase online, for trying this on yourself)

Key Terms

Be sure to familiarize yourself with the definitions for all key terms. These can be found in the course resources or using an on-line medical dictionary.

Cephalic presentation

Complete breech

External version

Footling breech

Frank breech

Incomplete breech

Moxabustion

Vertex

Introduction

As the art of vaginal breech births has largely been lost from conventional obstetric practice and replaced by cesarean section because of fear of breech vaginal birth, and as midwives – even in states where midwifery is

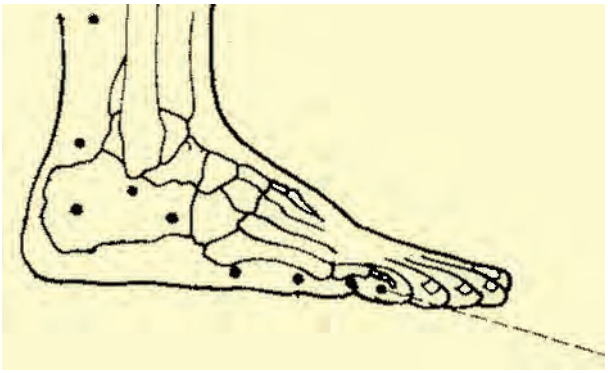
legal - are generally prohibited from assisting in breech births at home because it is considered a high-risk birth, women are seeking alternatives to cesarean section for breech birth.

The primary conventional medical method of preventing breech birth is External Cephalic Version (ECV), the manual transabdominal rotation of the fetus into a cephalic (head down) presentation. The practice was generally discontinued after the 1970s because of poor fetal outcomes, but was revived in the 1980s and is now considered a safe and effective means for avoiding cesarean section due to breech presentation when accompanied by ultrasound to guide the process. External version is performed in a hospital room, often near a surgical room, should emergency cesarean be necessary as a result of cord entanglement, fetal hypoxia, premature rupture of the membranes, or separation of the placenta, that can occur during the process. The average success rate for the procedure is 58%. Efficacy is greater when the procedure is performed between 34 and 37 weeks, as compared to later in pregnancy, though the fetus may revert to its previous position requiring that the procedure be repeated.

This lesson provides a brief overview of breech presentation and the use of moxa. It is a great skill to offer your clients and is simple to learn and safe to apply, and women or their partners, can also do it at home themselves.

Moxibustion and Breech Presentation

Traditional Chinese medicine has long employed the use of moxibustion for the treatment of breech presentation during pregnancy. Moxibustion is the indirect application of the heated herb Artemisia, usually in the form of a cigar-like roll, to acupuncture point BLADDER 67 (located on the outside corner of the small toe), which for unknown reasons may result in spontaneous turning of the fetus to a vertex position.



A randomized control trial published in the Journal of the American Medical Association (Cardini and Weixin, 1998) concluded that when performed for 1 to 2 weeks from the 33rd week of pregnancy, moxibustion is an effective method for turning a breech baby. However, a significant number of breech babies will turn spontaneously between 33 and 37 weeks of pregnancy regardless of intervention, and would turn back to breech if attempts were made to turn it before then. In fact, conventional obstetric efforts to change a breech presentation to a vertex presentation are not begun until between 36 and 38 weeks for these reasons.

As a midwife I had the good fortune of learning this technique from master acupuncturist Dr. Mao Ching Ni in 1986. I have seen the technique be successful more often than not, and it is simple and a very safe intervention, of course when care against burns, which is easy to do. While I have not found it to be 100% reliable, I do achieve more success when the technique is begun earlier, as suggested in the article, and as mothers correlate movement of the baby with the treatment, it appears much more than simply the inevitable, spontaneous repositioning of the baby that has affected the results.

Overall, since the publication of the study mentioned above in JAMA, and also since the publication of this course and my textbook, additional studies and reviews have found mixed results with the use of 'moxa' to turn a breech to a vertex presentation. In fact a Cochrane review found limited evidence to support the use of moxibustion alone for turning a breech presentation. However, when combined with when combined with postural management techniques may reduce the number of non-cephalic presentations at birth and when combined with acupuncture, moxibustion may result in fewer births by caesarean section. Success with combined postural management suggests that this may actually be the effective factor – and in fact, the two have always been combined in my midwifery protocol. There is some evidence to suggest that the use of moxibustion may reduce the need for oxytocin.

One critique of moxibustion and breech studies is that few apply the actual recommended application of moxa to BL67 for the full recommended 15 to 20 minutes on each side, as typically recommended in acupuncture texts, but it is unclear whether 5 additional minutes would actually make a difference.

There appears to be no increased risk of PROM or other pregnancy complications with use of moxibustion compared to women who have not had this technique applied. Contraindications to the use of moxa for breech presentation may include, but are not limited to oligo- or polyhydramnios, known fetal abnormalities or growth issues with the baby, vaginal bleeding, placenta praevia, bicornuate uterus, gestational diabetes, hypertension and a history of premature rupture of membranes or premature labour. No research has been done on twin pregnancies; however, moxa is not recommended in "multiples" pregnancies as risks are far more complex than with a singleton breech pregnancy, and attempts are generally not recommended for changing fetal presentation in such cases.

See *Botanical Medicine for Women's Health* for more on breech presentation and additional supportive approaches to turning a breech prenatally.

HERBAL MEDICINE FOR WOMEN

Unit 3 Lesson 39

Difficulties Arising In Labor 1:
PROM, Post-Term Pregnancy, Dysfunctional Labor, and Partus Preparators

Learning Objectives

By the end of this lesson you will be able to:

1. Understand the normal process and basic physiology of labor
2. Describe the features of premature rupture of the membranes
3. Define the features of a post-term pregnancy
4. Define the features of a prolonged or dysfunctional labor
5. Define partus preparators, give examples, and describe the benefits and risks associated with their use
6. List and describe the characteristics of the most common botanical treatments for facilitating labor

Unit 3 Lesson 39 Difficulties Arising In Labor 1

Required Reading

Botanical Medicine for Women's Health, 2nd edition (Romm)

- Labor and Birth, pp 427-445

Herbs for an Easier Labor - https://avivaromm.com/herbs-easier-labor/

Recommended Reading

Blue Cohosh: History, Science, Safety, and Midwife Prescribing of a Potentially Fetotoxic Herb (Romm)

Key Terms

Be sure to familiarize yourself with the definitions for all key terms. These can be found in the course resources or using an on-line medical dictionary.

Cervical ripening
Dilatation
Dysfunctional labor
Dystocia
GBS
Incoordinate uterine contractions
Labor augmentation
Labor induction
Oligohydramnios
Oxytocin
Partus preparator
Post-term pregnancy
PROM/PPROM
Prostaglandin

Key Botanicals for this Lesson

Students should be familiar with the botanical name, common name, actions, common uses, forms of use, general dosage ranges, side effects, and contraindications of the herbs in the following list. Ideally, you will also be familiar with taste. This information can generally be found in the course and accompanying required reading materials.

Actaea racemosa
Caulophyllum thalictroides
Dioscorea villosa
Gossypium herbaceum
Leonorus cardiaca
Mitchella repens
Oenethera biennis
Rubus idaeus
Viburnum spp.

Unit 3 Lesson 39 Difficulties Arising In Labor 1

Introduction

Labor and birth occur with enormous individual variation. Each woman's birth will be as unique as she is, as her body is, as her baby is, and as her own life and sexual history. Women's bodies are designed for the birthing process and only rarely do medical or anatomical problems truly prevent normal birth. However, many factors influence the experience of labor and birth in the US and interfere with its innate, natural expression, perhaps most significantly, the environment in which birth occurs. Standards in the obstetric management of birth have placed often unreasonable and unnatural parameters on the birthing process, requiring women to dilate and birth within specific time frames, in certain positions, and in a setting that fosters the belief that pregnancy is a disease and birth a dangerous process that puts the mother and baby in mortal danger. This places a terrible burden on the laboring mother, as well on a care provider trying to assist her in achieving a natural birth. Lack of support for a physiologically normal and healthy birth further detracts from a woman's ability to birth naturally and spontaneously. In many cases, herbs can be used to assist the physiological processes and enable the woman to avoid unnecessary and often routine interventions, and reduce stress, anxiety, and discomfort for the mother, and indirectly the baby, during the birthing process.

A number of common events can arise in or around labor – pre-labor rupture of the membranes (PROM), long labor, fatigue and pain experienced by the mother, and incoordinated uterine contractions can all lead to obstetric interventions and cesarean section that in many cases could be prevented if

a) normal variations were allowed to unfold in individual labors, and/or

b) natural methods were used to support the mother and facilitate labor. Simple measures such as rest, adequate nutrition, emotional support, massage, and various positions are among the techniques that can be used to facilitate birth.

Herbs cannot compensate for an obstetric system gone awry nor are they a panacea for all problems that might arise in labor and birth. Birth activism is necessary to change the birthing environment for women in the US so that the body can do best what it is designed to do in most cases – birth with innate wisdom, and human wisdom is necessary to know when the birth process has departed from a normal physiologic event to one that does require medical intervention for the benefit of mother, baby, or both. However, herbalists knowledgeable in the use of botanicals for women's health can be of great service in guiding midwives in the advanced use of botanical medicines, as well as helping mothers improve their birth outcomes. This lesson and the next focus on some of the variations of labor that can arise, and the herbal support of the mother. While not all births will go the way of a woman's hopes and dreams, there is a great deal that can be done to support normal, physiologic birth, and herbal medicine is a part of this medicine bundle.

Unit 3 Lesson 39 Difficulties Arising In Labor 1

Disclaimer: The protocols used in my midwifery practice were outside of the scope of expected protocols of conventional obstetric care. It is my personal belief that every woman taking personal responsibility for her health has the right to make decisions outside of the limiting protocols of current obstetric birth management as long as she is not putting her safety or that of her baby in danger based on the BEST available evidence about birth. The material presented in this lesson, the required reading, and throughout the course, is intended for educational purposes only. Herbal educators and practitioners are not qualified birth attendants or obstetric care providers; all issues regarding the care of pregnant women should be addressed by midwives and other qualified obstetric care providers. The role of the herbalist is as a consultant to the care provider or mother who is working fully in conjunction with her obstetric care provider.

PROM

Premature rupture of membranes (PROM) refers to rupture of the membranes (ROM) – the amniotic sac that surrounds, encloses, and protects the fetus – prior to the onset of labor. It is now also sometimes referred to as pre-labor rupture of membranes. While most women (70%) will go into labor spontaneously within 24 hours of their membranes rupturing, a percentage will not commence labor until after this, sometimes as long as 48 hours after ROM, by which time 85% of women will enter labor. When rupture is not accompanied by active labor within 24 hours, the condition becomes known as prolonged rupture of membranes. By 72 hours, 95% of women will have entered labor without intervention. Though I find it difficult to even label this phenomenon as a "condition", women experiencing a delay between the time of ROM and onset of labor will be labeled or diagnosed with this "condition" and their care provider will be required to subject the mother to a set of labor management protocols based on the length of time the membranes are ruptured. PROM is one of the controversial birthing areas in which midwifery experience is often contrary to conventional obstetric practice.

Current obstetric practice holds that prolonged PROM is associated with a higher rate of infection than when the baby is born within 24 hours of rupture. Thus, process is generally actively managed with medications to stimulate labor. In some cases, PROM may actually be associated with an insufficient intrinsic production of oxytocin, in which case, labor may never commence spontaneously, and oxytocic medications are eventually required to induce labor. It is not possible to discern in advance which women have endogenously low oxytocin. However, for many women, watchful waiting and practices that prevent the introduction of microorganisms into the vaginal canal/uterus (i.e., avoidance of all digital vaginal exams to assess dilatation) are enough to prevent infection while allowing labor to commence spontaneously. In fact, many midwives support women remaining at home with prolonged rupture up to 48 or even 72 hours without an observed increased incidence of infection and with the spontaneous onset of labor resulting in normal vaginal birth. A study by Lewis Mehl, formerly an OB-GYN, now a shamanic psychiatrist, in the 1980s demonstrated no increased incidence of infection at 4 days post ROM if the rule of nothing inserted into the vagina (i.e. no vaginal exams) was strictly observed. Unfortunately, the politics of homebirth midwifery which is illegal in many states, or governed by strict protocol in legal ones, makes it legally/politically risky for the midwife to take an extended watchful waiting approach, and also makes it difficult for the mother who has to transport to a hospital with prolonged rupture of membranes and face the recrimination of medical staff for not coming to the hospital sooner if labor has not commenced. Thus midwives often use herbs and other labor stimulation techniques to encourage labor to start readily, thus avoiding the stigma of prolonged ROM. Contraindications to watchful waiting ("expectant management") include

severe oligohydramnios (insufficient amniotic fluid), fetal distress or non-reassuring fetal heart tracings, intrauterine infection, and vaginal bleeding – all of which require medical attention and intervention.

As discussed previously in this course, 40% of all women at any given time upon vaginal culture, will be found to be positive for group B strep infection (GBS). When there is prolonged rupture of membranes in the presence of GNS, there is a risk of the baby contracting this infection intranatally. Of those babies that are exposed, 1% develop serious life threatening infection if the mother does not receive IV antibiotics. For GBS positive mothers, it is therefore protocol that they give birth within 24 hours of ROM unless receiving intravenous antibiotic therapy during the course of labor. This situation, therefore, requires different consideration than prolonged ROM in the absence of GBS. If a mother has not been tested for GBS prior to labor, she is presumed to be positive for the infection and treated accordingly.

When PROM occurs prior to 37 weeks gestation it is called preterm PROM or PPROM. In this case, complications of prematurity confound the situation, and in fact PPROM can itself occur as a result of already existing problems, for example, infection or premature labor. Tocolysis is contraindicated in PPROM and antimicrobial herbs are not adequate to prevent intrauterine/fetal infection.

Botanical Strategies for PROM/Prolonged ROM

Should the mother be close to term and PROM occur, there are three possible approaches, the choice of which is based on maternal and fetal risk factors and the presence or absence of concurrent problems and obstetric support:

1. Watchful waiting for a predetermined time;
2. Herbal protocol for the initiation of labor;
3. Medical management (expectant management, medical induction).

This section focuses on the herbal protocol for labor initiation. The protocol for labor initiation for PROM uses the same botanicals as for post-term pregnancy, however, the protocol is applied for a more concentrated period of time and shorter duration. A midwife (or OB) should be monitoring the mother for signs of infection and fetal well-being throughout the protocol. It typically takes a minimum of 12 hours to get effective contractions going with herbs – often up to 24 hours. Thus this must be kept in mind when considering the circumstances – i.e., availability of OB support, need to transfer care to a medical setting from homebirth, or transfer to a hospital from a birthing center.

Prior to the last 15 years there was little concern over the safety of using blue cohosh in protocol to start labor based on its historical use as a *partus preparator* and labor aid. Thus it was the mainstay of herbal protocol amongst midwives for labor induction and augmentation. Current concerns about blue cohosh in labor are addressed in the required reading summarized below under *Partus preparators*. Many midwives now choose to use blue cohosh only under close supervision and for a short period of time as might be applied for PROM or post-term pregnancy, or forego its use in favor of cotton root bark which does not contain cardioactive alkaloids. Other midwives, however, feel that the historic and traditional use of blue cohosh is enough to suggest its safety and continue to use it without concern. My bottom line with the herb is summarized later in this lesson.

8-hour PROM Herbal Protocol

Combine 20 mL blue cohosh (or cotton root) and 8 mL black cohosh in a 1-ounce dropper bottle

Give 3 mL of the combination every hour for 4 hours

Give 2 mL of the combination every 30 minutes for 4 hours

During this time, nipple stimulation is applied for 30 minutes during the second hour of the protocol and the mother is encouraged to take a long walk (do not use a public bathroom with broken waters so stay close to home!). If contractions have not commenced after 8 hours on the blue cohosh, discontinue.

An abdominal massage with hot castor oil may be used twice during the protocol to attempt to stimulate uterine contractions. Castor oil may also be ingested (2 oz dose repeated 2-3 times, mixed into orange juice in a high speed blender to make it tolerable to drink). Oral ingestion generally leads to copious diarrhea so do after a walk and make sure the mom is taking adequate fluids and electrolytes to replace what is lost.

Keep in mind that nothing should be placed in the vagina in cases of ROM, thus if evening primrose oil is included as part of the protocol for cervical ripening (the evidence for the efficacy of this practice is mixed), it should only be used orally. Many times I have been asked whether herbal antimicrobials, for example, echinacea, should be given to reduce the risk of intrauterine infection. While there is likely no harm in giving such herbs during the latency period with PROM, these herbs are not adequate assurance against intrauterine infection, and antibiotics should be used if there is significant concern over risk of infection and certainly if there are any signs or symptoms of infection. Concerns have also been raised over whether the use of echinacea in labor will elevate the white blood cell count and therefore give the appearance of infection in the absence of one should the mother enter the hospital and have blood work drawn. This is an unlikely effect of echinacea though it has not been evaluated since a report in the 1930s in a study performed on healthy students at the Eclectic Medical College in Cincinnati. Subjects volunteered to study the effects on the blood by taking *E. angustifolia* root extract for 4 days. They used the Lloyd Brothers proprietary Specific Medicine Echinacea (1:1; 65% ethanol made from fresh root) in water at doses representing 2-15 grains (0.13-1.0 mL) of the dried root. An increase in the total white blood cell count reached a peak in two-thirds of the subjects after 24 hours and in the other third after 48 hours. The leukocyte increase from 24-48 hours was caused mostly by neutrophils in 24 hours and by lymphocytes in 48 hours. Total and differential counts were relatively normal from 72-96 hours. Note that WBC count is normally elevated in pregnancy and this is sometimes overlooked or misconstrued as infection by unknowing emergency department staff.

Post-term Pregnancy

This topic, including a standard botanical protocol for labor initiation, is covered extensively in *Botanical Medicine for Women's Health:* Labor and Birth – please read that chapter now if you have not already done so.

Post-term pregnancy, also referred to as prolonged pregnancy or post-dates pregnancy, is a pregnancy that persists beyond the end of 42 weeks from the start of the last menstrual period (LMP). It is estimated to occur in 6 to 12 percent of all pregnancies. The etiology is unknown in most cases, unless associated with a fetal problem, for example, anenecephaly (due to concomitant hypoplastic fetal adrenal glands). Significant disparity exists between midwifery and obstetric beliefs and practices surrounding post-term pregnancy and how it should be approached, though midwives practicing under legal restrictions are generally required to follow common obstetric practice in this regard. Many midwives, especially homebirth midwives, and pregnant women with an uber-natural orientation are of the belief that pregnancy should be allowed to proceed until the mother enters labor naturally, and this will eventually occur without consequences to the mother or child. Conversely, many OBs believe that pregnancy should not be allowed to persist beyond 41 weeks and will induce or perform a cesarean to ensure this, in spite of the position of the American College of Obstetricians and Gynecologists' (ACOG) support of pregnancy not requiring induction until the end of 42 weeks gestation unless there is an extenuating medical circumstance or a macrosomic (extremely large => 4000 g) baby.

My experience is that the optimal response to a post-term pregnancy is an individualized approach that seeks a balance between the extremes. I have seen too many women pressured into labor before necessary, and I've seen a handful of cases where midwives waited too long before trying to induce labor and it either was ineffective or there was a post-term baby needing resuscitation! Having a balanced attitude is an important quality in health care and health education. In most cases, attempting induction prior to 41 weeks is unnecessary, and it is best to begin attempting to induce with herbs no later than the middle of the 42nd week if a homebirth is being planned, because this gives the midwife and mom a few days to work with before a medical induction is on the table. It also minimizes risks to the fetus of being born too far post-term.

Here's the problem: pregnant women and midwives often bump up against an OB who insists on induction/deliver/cesarean by a certain date — sometimes well before the end of the 42nd week. Thus the pregnant woman is pushed to choose between medical intervention and herbal methods. When induction is inevitable or necessary, with careful monitoring of the uterus for intensity of contractions, along with diligent monitoring of the fetal heart rate, certain herbs such as cotton root, blue cohosh, and black cohosh may be used judiciously. The expert guidance and monitoring of a midwife or obstetrician trained in the use of botanical medicines is advised.

Botanicals commonly used

- *Caulophyllum thalictroides* (blue cohosh)
- *Gossypium herbaceum* (cotton root)
- *Actaea racemosa* (black cohosh)
- *Oenathera biennis* (evening primrose) (1000 mg daily, for 1 week)

Adjunct therapies

- Cervical application of evening primrose oil (2000 mg) twice daily until labor begins
- Adequate rest
- Adequate intake of carbohydrates, protein, and dietary fats
- Psycho-emotional readiness for labor
- Nipple stimulation
- Pressure-point massage
- Exercise
- Intercourse/orgasm
- Stripping membranes

The Use of Herbs as Partus Preparators and for Labor Induction

Partus preparators are herbs historically used during the last weeks of pregnancy to tone and prepare the uterus for labor and to "ensure a speedy delivery." Examples of *Partus preparators* include blue cohosh, black cohosh, partridge berry *(Mitchella repens)*, and spikenard *(Aralia racemosa)*.

The use of herbs for labor stimulation is popular, both with self-prescription among pregnant women and prescribing by midwives. The pressure to give birth by a certain date in order to avoid artificial induction is the primary incentive behind such use, followed by the desire of pregnant women to avoid postdatism for personal comfort. In a study by Westfall and Benoit, a panel of 27 women was interviewed in the third trimester of pregnancy, and 23 of the same participants were re-interviewed post-partum (50 interviews total). Many of the women said they favored a natural birth and were opposed to labor induction at the time of the first interview. However, all but one of the ten women who went beyond 40 weeks gestation used self-help measures to stimulate labor. These women did not perceive prolonged pregnancy as a medical problem. Instead they considered it an inconvenience, a worry to their friends, families and maternity care providers, and a prolongation of physical discomfort.

A national survey of 500 members of the American College of Nurse-Midwives and 48 nurse-midwifery programs was conducted by McFarlin et al (1999) to determine whether they were formally or informally educating students in the use of herbal preparations for cervical ripening, induction, or augmentation of labor. Ninety surveys were returned from CNMs who used herbal preparations to stimulate labor and 82 were returned from CNMs who did not. Of the CNMs who used herbal preparations to stimulate labor, 93% used castor oil, 64% used blue cohosh, 63% used red raspberry leaf, 60% used evening primrose oil, and 45% used black cohosh. The most cited reason for using herbal preparations to stimulate labor was that they are "natural," whereas the most common reason for not using herbal preparations was the lack of research or experience with

the safety of these substances. Although 78% of the CNMs who used herbal preparations to stimulate labor directly prescribed them and 70% indirectly suggested them to clients, only 22% had included them within their written practice protocols. Seventy-five percent of the CNMs who used herbal preparations to stimulate labor used them first or instead of pitocin. Twenty-one percent reported complications including precipitous labor, tetanic uterine contractions, nausea, and vomiting. CNMs who used herbal preparations to stimulate labor were more likely to deliver at home or in an in-hospital or out-of-hospital birthing center than CNMs who never used herbal preparations to stimulate labor.

Initiation of labor may be medically necessary in some cases of postdatism or in the advent of PROM. Labor augmentation is required when contractions in a previously active labor cease or become ineffective. The use of a variety of herbs and approaches, including some of those used to induce or augment labor, are commonly a part of the protocol for prolonged or dysfunctional labors. The herbs most commonly used for labor induction are blue cohosh *(Caulophyllum thalicatroides)* and black cohosh *(Actaea racemosa syn. Cimicifuga racemosa).*

The use of herbs to prepare women for labor begs the question of why one would use an herbal preparation to prepare the body for something it naturally knows how to do, and seems antithetical to the principles upon which herbal medicine philosophy is built – to trust the body's innate wisdom. While a small percentage of women may truly need pharmacological help with induction or pain management once labor has ensued, most women can enter labor naturally and given proper support, experience labor and birth without the use of drugs for augmentation or pain relief. However, this requires confidence in the ability of a woman's body to function well – a confidence that our society has all but vanquished from the average woman (and her practitioner). The widespread use of blue cohosh to stimulate labor may be a problem in itself, but more importantly, it is symptomatic of a greater medico-sociological problem. Health practitioners in the position to do so must help to educate their colleagues about the natural process of labor and a woman's (and baby's) ability to accomplish it successfully and safely, thus mitigating the need for any pharmacological intervention except in cases of true need. Then, research can help inform the practitioner and client as to the safest and most reliable herbs or medications for the individual situation.

Recommendations for further research and blue cohosh use

While the likelihood of a serious adverse event occurring as a result of the short-term use of blue cohosh for the induction or augmentation of labor seems unlikely based on a review of the case reports, the pharmacology of the herbs does allow for the possibility of adverse effects. There is limited information on the safe use of this herb clinically. Retrospective and or prospective studies are essential for evaluation of blue cohosh safety and efficacy as a short term oxytocic, and should include studies comparing its safety and efficacy to medical approaches that are the current standard of obstetric care. A careful review of the currently available data suggests that:

1. Blue cohosh cannot be advised as a safe abortifacient due to the risk of teratogenicity and embryotoxicity to the embryo/fetus, and due to the risk of toxicity in the mother from the high doses that are likely required for efficacy.

2. Blue cohosh should never be used in the first trimester to prevent miscarriage or for any other reason due to the risk of teratogenicity and embryotoxicity.

3. There is not enough evidence to demonstrate efficacy of blue cohosh for the completion of a spontaneous or missed abortion, however, lack of fetal viability eliminates the fetal component of risk. Toxicity to the mother when used within the recommended dosage range appears to be minimal, however, cannot be entirely excluded.

4. Due to risk of fetotoxicity and cardiotoxicity, use in the form of a *partus preparator* cannot be recommended under any circumstance.

5. Toxicity risks may be slightly mitigated by use of tinctures which have been demonstrated to contain fewer oxytocic and cardioactive alkaloids and saponins.

6. Until further research is conducted, use of this herb should be limited to short term use (i.e., less than or equal to 1 day using no more than 3 g crude herb equivalent) for labor induction or augmentation, and should occur under the guidance of a qualified obstetric health professional, with careful maternal and fetal monitoring.

7. The most prudent policy is to avoid internal use of blue cohosh entirely during pregnancy until further studies evaluate safety.

8. Programs training obstetric health care providers should incorporate instruction on botanical medicine safety.

Clinical studies of midwife use in practice are also possible and should be explored. Efficacy studies can be done to establish whether there is indeed an oxytocic effect of this herb and, if so, at what doses of which constituents in the product. If efficacy is proven and safety established, it would be reasonable to develop a standardized blue cohosh extract that will deliver a safe and effective dose thereby allowing the continued use of this traditional product.

Prolonged Labor/ Dysfunctional Labor

Prolonged labor is medically defined as a labor that does not conform to Friedman's curve, a graph of the predicted rate of dilatation for women having their first babies, second through fourth babies, and multiparous women. The rate of active labor for primiparous women is about 12-14 hours, and much shorter thereafter. However, it is well known that the Friedman's curve is not reflective of the actual experience of most women giving birth who experience, in fact, quite a wide range of rates of dilatation. Most midwives therefore consider the length of labor and progress of dilatation to be relative to the overall well-being of the mother and baby. Therefore, a woman might make slow progress and have a very long labor, but tolerate the experience well both psychologically and physically. Prolonged labor can be caused by numerous factors, including individual variability, presentation of the fetal head, pelvic size, and relative tone or relaxation of the pelvic muscles. Coordinated uterine activity, effective endogenous hormone levels, and maternal nutrition and hydration can influence effectiveness and length of labor. Furthermore, psycho-emotional factors can influence the length of labor and a woman's ability to birth.

Botanical Strategies for Prolonged Labor/Dysfunctional Labor

There are effective protocol for facilitating labor and birth in such circumstances, once extenuating factors (such as fetal malpresentation) are ruled out. It is important to make sure there are no obstructing mechanical or physical factors to labor; you don't want to force contractions when the head is malpositioned as this can only compound the malpositioning and increase the risks of exhaustion and distress in mother and baby without facilitating labor.

When the reasons for prolonged and dysfunctional labor are not due to obstruction or medical problem, there are two distinct approaches to take when labor has become protracted: use of herbs to promote uterine contractions and stimulate labor, or herbs to promote maternal relaxation and rest. The former approach is best taken when the mother is still energetic but the uterine activity inefficient (weak or infrequent contractions). The latter approach is preferable when the mother is already exhausted, when the pelvic muscles need to relax to allow for proper rotation and positioning of the fetal head, or when the uterine contractions are spastic or uncoordinated. In many cases it is optimal to initially promote relaxation and rest, and then begin herbs to stimulate labor once rest and relaxation have been achieved. To promote uterine activity, herbs used for post-term labor and PROM should be considered, following the dosing strategy for PROM. Herbs for promoting relaxation include nervine sedatives and uterine relaxants. A typical formula follows:

Viburnum opulus	20 mL
Leonorus cardiaca	20 mL
Passiflora incarnata	15 mL
Lavendula officinalis	5 mL

Dose: 1/2 –1 tsp every 15 minutes until relaxation is achieved. Typically, 4-6 doses are required. This is an effective formula for promoting sleep even when labor is active. This is the best strategy for helping the mother regain her energy and for allowing for pelvic relaxation. Additionally, I have found that small amounts of ginseng

– either a pinkie-finger nail sized sliver of the dried root, or 2-3 mL of tincture can surprisingly boost a woman's energy in a protracted labor when she has had some rest and needs to get revved up again for contractions. In one case, I had a laboring mom who was stuck at 5 cm dilatation. She was frustrated and tired, though not exhausted, and her contractions had petered out. I couldn't decide whether to promote rest or stimulate contractions so I decided to give a small amount of ginseng, passion flower, and motherwort. She fell asleep shortly after, resting for 2 hours and waking up 7 cm dilated!

Effective uterine contractions require a balance between muscle contraction and muscle relaxation. Therefore, a combination of herbs with uterotonic activity and antispasmodic activity may classically be given – for example, blue cohosh and black cohosh, cotton root and cramp bark, or motherwort which incorporates both.

Additional Treatment

Numerous strategies for positional changes, massage, and other techniques to facilitate labor are presented in *Botanical Medicine for Women's Health*.

Birth as an Inner Journey — Herbs as Partners

The experience of labor and birth has the potential to take a woman deep within herself to the core of her strength and power. For women who have never done deep spiritual work or any kind of inner journeying, this connecting to core can be terrifying, and the journey into soul frightening and unfamiliar. The voice, touch, guidance, and support of a woman experienced in the birth journey is invaluable in helping women successfully navigate the birthing road. In addition, a number of herbs can be used to help alleviate fear and anxiety. Motherwort is a grounding herb, restoring a sense of centeredness and strength and helps a woman to find her "lioness heart" (Leonorus cardiaca). Skullcap soothes and eases the nerves, especially if the woman feels irritated and overstimulated in her environment. Passionflower quiets and soothes. Chamomile eases and relaxes. Lavender lightens the spirits. Some midwives have used lobelia oil as a topical application for a rigid cervix. The combination of women's birthing wisdom and herbal wisdom can provide enormous relief and support for a laboring momma.

Herbs in Action in the Hospital: Viva la Revolucion

I was on call on the labor and delivery unit at the hospital one day in my last year of medical school. On call with me was a richly experienced certified nurse midwife – I'll call her Mary. A tall, large woman who might be imposing if she weren't so soft and yielding in body and with a wide warm smile, Mary was close to 60 years old, with white hair and subtle earthy jewelry peeking out from under her shirt's neckline. She'd been doing birthing work for over 20 years when I me her. Years ago she had started one of the first homebirth midwifery practices in our state and was now an invaluable presence on the L&D of the major teaching hospital at which I was rotating, able to navigate the system to help women achieve as non-interventive a birth as possible. We'd been looking forward to working together for some time, and now we had the chance on a rare afternoon on which the entire resident staff was off on a field trip enjoying an afternoon boat tour off the Connecticut Sound.

Look out, here come the midwives!

Tanya came into the hospital in early labor late that morning. A tiny thing, not even 5 feet tall and barely 90 pounds pre-pregnant I am sure. She was flanked by 2 women who shared her language, mode of dress, and general appearance, which we shortly to discover was Ecuadorian (they were speaking Quichua). The woman on her left was her sister, the other her best friend from her village back home. Tanya's English was limited and neither Mary nor I spoke Quichua, but with a little Spanish and the friend glad to serve as an interpreter when needed, we all conversed easily. The friend told us she had "been to a lot of births" sometimes even helping at home when "the baby was coming too fast for the doctor." Mary and I shot each other a look over that one – maybe we have three midwives in this room! There was a lot of smiling going on in that room.

Seeing that we weren't really needed and not wanting to interfere with the innate support and birthing juju going on in that room, Mary and I decided to duck out and leave them to their resources. Tanya was clearly getting what she needed. Mary simply told Tanya's friend to make sure Tanya drank plenty of fluids to keep hydrated for the labor ahead (Tanya was about 4 cm dilated). At this, the friend reached over to the windowsill and lifted a large-sized Dunkin' Donuts coffee cup that she proceeded to hand over to Tanya. Mary quickly said, "Oh no, not coffee in labor – just juice and water." The friend smiles and says, "Oh, pardon, this is not coffee – it is an herb tea we use for birth back at home." Mary and I shoot each other a "this is getting interesting" kind of glance and I proceed to ask what the herb is – my ethnobotanical-geeked-out-herbalist-midwife-self jumping up and down inside with ebullient enthusiasm! The friend is not exactly sure what the herb is called in English, but the final decision based on smell, color, and every possible angle of interpretation we could make based on its food uses is that it was likely oregano – though basil is a distinct possibility. We clearly approved of the home medicine and they looked clearly relieved that it was okay to bring their own culture and medicine into a place that is anything but a small Ecuadorian village!

Mary and I sat and chatted for a while, bemoaning modern birthing practices and acknowledging what was going on in that little haven of Tanya's hospital room. We poked our heads in about an hour or so later. Tanya was working harder. Her friend and sister were still beside her. The coffee cup was empty of its herbal birthing tea. Sweat glistened on her forehead as she tried to get comfortable on the pillows her friends set up on the floor so she could squat or move to hands and knees. Mary and I gave them our quiet but hearty approval and again, not wanting to interfere with a good thing, we left the room with more smiles, letting them know we were nearby if they needed us. We let them be. They knew what they were doing.

About thirty minutes later I said to Mary, over our cups of tea, "Hey, maybe we should go check on Tanya – she was seeming pretty intense when we left her room." "Yeah, let's go," she replied. Minutes later we found ourselves running up the hallway toward the commotion and excitement outside of Tanya's room. A nurse exclaimed, "She just popped that kid out! We didn't even have time to find you guys. One of the fellows on the floor ran in and caught the baby!" Mary and I are a tiny bit breathless, a tiny bit apologetic for missing the birth – though really we were more disappointed than anything, and secretly delighted that she had a fast and smooth birth without any interference. We walked in as her placenta was emerging. She smiled up at us over her baby's tiny head, and through her tears of joy. Her sister, also crying, was looking over her shoulder at her niece, and the friend just sat calmly in the chair, a pleased and knowing look on her face, and an empty D&D coffee cup behind her on the windowsill.

Risks and cautions associated with the various conditions presented in this lesson are discussed in the accompanying textbook; the risks of blue cohosh and "partus preps" are discussed in both the lesson and textbook.

Case 1

Tamara, a 41-year old woman, 36 weeks pregnant, phoned in requesting help to get her labor started. Upon hearing this odd request, I questioned the woman further and discovered that her previous baby had been born at term (40 weeks) weighing 10 pounds, causing a long labor and eventually a cesarean section. Now at 36 weeks gestation this baby was already at an estimated fetal weight of 7.5 pounds. With an average weight gain of 0.5 pounds per week in the last months of pregnancy, she was again contemplating a large baby, and this time was being warned to prepare for another cesarean section, which she desperately wanted to avoid if at all possible. Given the circumstances I informed her I would be willing to assist her as long as she had the support of her primary care provider and nurse-midwife (CNM), and that we must wait until 37 weeks gestation to begin the protocol to ensure optimal fetal lung maturity. She spoke with her CNM, and phoned that week to tell me that she had her full-support, and that the CNM was in fact intrigued by the idea of seeing an herbal protocol in action. The midwife performed a vaginal examination to check for cervical ripeness and found her cervix to be unripe – entirely undilated and uneffaced, long, and posterior. I had the client begin a protocol of taking evening primrose oil (EPO) for one week to help ripen the cervix, for which it is acclaimed by midwives due to its high prostaglandin activity. She was to take 2000 mg by mouth, and to apply an equal amount to her cervix daily. This could be done either manually, or it could be used as a lubricant by applying the oil from opened gel capsules to the glans of her husband's penis immediately prior to intercourse. Semen also contain prostaglandins which are capable of initiating cervical ripening, so the latter method was encouraged. After one week of this protocol she retuned to her CNM who, upon performing another vaginal examination, found her cervix to be soft and 1 cm dilated. The next day the client was instructed to begin the following herbal protocol:

- Every hour on the hour, for four hours, take 2 mL each of black cohosh and blue cohosh tinctures.
- Every hour for 3 hours, on the half hour, take 1 tbs castor oil, blended vigorously in 1/4 cup orange juice.
- After 4 hours, increase the frequency of the tinctures to every 30 minutes. Discontinue after 4 hours.

During these 8 hours, she was to take walks, eat well, shower, and rest. The protocol was initiated at 10 am and was discontinued at 6 pm. During this time the client experienced no contractions, and quit for the evening and went to bed early. She was awakened toward the middle of the night with regular contractions which persisted with increasing intensity until morning, and shortly after waking, gave birth to a healthy 8 pound son.

Case 2

Clara, a 24-year old petite woman, was now 41 weeks and 6 days gestation with her first baby. She'd had some mild irregular uterine activity – crampy contraction – for the previous 2 weeks, but no imminent signs of labor. Her cervix was undilated and about 30% effaced. Her family practice doctor who was her back-up physician for her birth recommended she insert Cytotec and then see what happens. She was supportive of her laboring and birthing at home if the Cytotec kick-started her labor. However, Clara was not keen on this approach, and the use of Cytotec for a homebirth was beyond my comfort zone as a homebirth midwife. We discussed options and Clara instead began taking traditional Mother's Cordial (Herbalist and Alchemist brand from David Winston before blue cohosh was removed from the formula) tincture *(Mitchella repens, Verbena officinalis, Viburnum opulus, Caulophyllum thalictroides, Helonias,* and *Zingiber officinalis)* to initiate labor. Her protocol was as follows:

Day 1: 5 mL four times

Day 2: 2.5 mL every two hours

By the middle of day 1 Clara began having mild uterine contractions. By 1 pm on Day 2 she was in labor with contractions 5 minutes apart, so the protocol was discontinued. Her baby was born at 10:35 pm on Day 2 of the protocol, with no complications for mother or baby. Fetal heart tones were monitored throughout labor. Her daughter was born the day after Clara's mother's birthday and the day before her own!

Unit 3 Lesson 39 Difficulties Arising In Labor 1

Herbal Extracts from: *The American Materia Medica, Therapeutics and Pharmacognosy,* Finley Ellingwood, M.D. (1919)

Partridgeberry *(Mitchella repens)*

Synonyms: Squaw Vine (Author's note: this name is now out of favor because of its derogatory implications)

Constituents: Saponin-like, resin, wax, dextrine, mucilage.

Preparations:

Specific Mitchella: Dose, from five to sixty minims

Syrupus Mitchellae Compositus, Compound Syrup of Mitchella: Dose, from one to two drams.

Therapy: The sphere of action of mitchella is upon the reproductive organs, particularly upon those of the female. It is not enlarged upon by our writers, but is known positively to a few practitioners. It is par excellence the partus preparator. The importance of removing every possible influence that increases in any way the severity of labor, does not impress itself upon physicians, unless an exceedingly severe labor is anticipated, when the excess pain is alleviated at the time by chloroform and morphine. Not only can all complicating influences be removed, but the nervous system can be so influenced that parturition to the mother can be shorn of dread and terrors, and can be looked forward to without anxiety or fear. We are so apt to think of the pain and horror of labor as a natural inheritance for each mother – something that she must expect, and should not try to shun, that we do not take the care we could in many cases, to shield her from it.

If a good preparation of mitchella be administered once or twice daily for the sixth and seventh months of pregnancy, three times daily for the eighth month, and in larger doses as confinement approaches, the influence upon the entire system will be most marked. I have observed this influence in so many cases that doubt is impossible. Erratic pains and unsatisfied longings are removed, the nervous system assumes a tranquil condition, reflex symptoms abate, the urinary function is performed normally, the bowels become regular, imperfect digestion is improved, and the appetite becomes natural. Labor approaches, devoid of the irritating, aggravating complications, the preparatory stage is simple, the dilatation is completed quickly, the expulsive contractions are strong, unirritating, and effectual, and are much less painful than without the remedy; involution is rapid and perfect, there are no subsequent complicating conditions to contend with, the patient's strength is not abated, and the function of lactation is in its best condition. This has been proven in very many cases. After making the above statements, evidences accumulated rapidly confirming their truth. Auxiliary measures such as judicious dieting, a thorough oiling of the enlarged abdomen, and an occasional hot sitz bath for the last few weeks will materially assist the remedy. Less of it need be taken.

The bark of the fresh root in hot infusion given occasionally during the progress of labor when no previous care of the patient has been afforded the physician, will work wonders in some tedious aggravating cases.

In uterine disorders at other times this agent is a most effectual remedy. It overcomes painful menstruation, regulates the function, relieves congestion in the pelvic organs and soothes general irritation of the nervous system from uterine or ovarian causes. Dr. Hemminger of Pennsylvania uses mitchella to prevent abortion. He gives it in twenty drop doses three times a day. In two years he had six cases that had aborted from one to three times each, always with dead children. With the use of this medicine, each of the six gave birth to a healthy child. The medicine was given throughout the entire period of gestation.

Co-Operatives: It works harmoniously with cimicifuga, pulsatilla, aletris, helonias, senecio aureus, and viburnum. Combinations of these agents compose the usual proprietary compounds, advertised as "female regulators."

HERBAL MEDICINE FOR WOMEN

Unit 3 Lesson 40

Difficulties Arising In Labor 2: Pain and Exhaustion

Learning Objectives

By the end of this lesson you will be able to:

1. Understand the impact of a woman's experience of labor pain on the birth experience and understand the possible reasons for the effects of exhaustion on the mother and labor outcome
2. List and describe the non-pharmacologic methods for pain relief in labor
3. List and describe the characteristics of the most common botanical treatments for facilitating labor, alleviating pain, and relieving exhaustion in this lesson and the associated required reading.

Required Reading

Botanical Medicine for Women's Health, 2nd edition (Romm)

- Pain in Labor, pp 439-445

Principles and Practice of Phytotherapy (Mills and Bone)

- Review relevant herb monographs from Key Botanicals list below

Key Terms

Be sure to familiarize yourself with the definitions for all key terms. These can be found in the course resources or using an on-line medical dictionary.

Acupuncture

Aromatherapy

Doula

Dysfunctional labor

Epidural anesthesia

Hydrotherapy

Hypnosis

TENS

Key Botanicals for this Lesson

Students should be familiar with the botanical name, common name, actions, common uses, forms of use, general dosage ranges, side effects, and contraindications of the herbs in the following list. Ideally, you will also be familiar with taste. This information can generally be found in the course and accompanying required reading materials.

Actaea racemosa

Anemone pulsatilla

Cannabis spp.

Eschscholtzia californica

Gelsemium sempervirens

Humulus lupulus

Hypericum perforatum

Lavandula officinalis

Leonorus cardiaca

Lobelia inflata

Matricaria recutita

Panax ginseng

Passiflora incarnata

Piper methysticum

Viburnum opulus/V. prunifolium

Introduction

Pain in labor is a naturally expected part of the process for most women — though a rare few do report a painless or even orgasmic experience of childbirth. Preparing for labor the way one might prepare for an Olympic event or a vision quest, gathering a medicine basket of tools and skills to move through the process, can help the woman make peace with the possibility that the process requires work and working with. The primary reasons a woman will experience intolerable or disproportionate pain during labor can be due to:

1. Lack of personal preparation and development of inner resources and skills for coping with labor
2. Lack of adequate physical, emotional, and spiritual support and guidance during labor
3. Physical and mechanical obstruction of the labor, ineffective and incoordinate uterine contractions
4. A medical complication such as placental abruption or uterine rupture

Exhaustion during labor is usually due to entering labor inadequately rested, an unduly prolonged labor, a dysfunctional labor, especially with frequent and ineffective uterine contractions.

Sometimes a woman will come to me planning a water birth or planning to use hypnosis for birth with the intention of having a painless experience. It is important to give these women realistic expectations — for most women, even with these tools, labor will not be a painless, easy experience, and to expect such can lead to frustration, disappointment, and quite a different experience than was hoped for. It is more effective to have realistic expectations and prepare for how one will embrace and move with the sensations of labor, reframe the experience into a positive personal challenge or quest, than to approach labor with an avoidance attitude. When a woman is approaching labor preparation with a painless birth in mind, this sends up a red flag for me that extra attention needs to be paid to preparing that woman for her experience as she might be starting with a hefty dose of fear and anxiety about pain…

Key Symptoms

Painful labor with poor progress toward birth, prolonged labor, delayed or arrested dilatation without an underlying medical cause, maternal irritability, nausea, or vomiting

Conventional Treatment

Painful labor is generally treated with analgesic medications, especially epidural anesthesia. When there is exhaustion, the woman might be given a rest period with analgesic medications, IV fluids, or cesarean delivery may be performed in the absence of adequate labor progress. Non-pharmacologic techniques can be used in the hospital, and may be available depending upon the willingness of the staff to make them accessible, for example, some hospitals stock birthing balls, options for hydrotherapy, and some nurses are willing to help with hands-on techniques such as massaging the laboring woman. Many women now choose to bring a

labor doula in order to have a "personal assistant" who can provide individualized labor support, including non-pharmacologic methods of pain management. This has proven a very effective method for improving birth outcome and reducing the need for obstetric intervention.

Botanical Treatment Strategies

Typically, herbs are not used to treat the normal pain associated with labor, however, when labor becomes prolonged and the mother exhausted pain can be more difficult to manage, even intolerable. Further, when there is fetal malpresentation, such as with a posterior position, labor can be more difficult. In such cases, herbal pain relief can relax the mother enough to facilitate a less painful birth. When there is maternal exhaustion, strategies for promoting rest are more important that trying to push the labor with uterotonic, oxytocic herbs. The body generally knows how to birth, but if the mom is tired, the muscles won't contract optimally and labor won't proceed effectively. So pushing a tired uterus with herbs is really counterproductive, whereas a well-placed resting time can do a world of wonders, after which, if needed, stimulating herbs can be added to the plan.

A combination of uterine antispasmodic herbs, for example, *Actaea racemosa,* the *Viburnums*, and *Dioscorea villosa* can be used alone or in combination with mild to strong nervines and analgesics. Piscidia, Lobelia, and Gelsemium are at the VERY strong end of the spectrum. Pulsatilla is another analgesic herb to use with caution in dosing, but a useful remedy when there is pain, anxiety, and other gentler remedies aren't quite doing the trick. It is a low dose herb with potential toxicity – use in 2-3 drop doses and repeat only once or twice. Kava kava is also effective as an analgesic, anxiolytic, antispasmodic, but sometimes the "floating" feeling it imparts might be discomforting to the mother. A low-dose of 10-20 drops is often enough to take the edge off of anxiety. The dose may be repeated every 15-30 minutes for several doses to achieve a desired effect, however, in some the effect creeps up cumulatively, so go easy!

Viburnum opulus is a very effective combination for pain reduction and spastic uterine activity and can be given as follows:

Piscidea erythrina	30 mL
Viburnum opulus	30 mL

Give ¼-1/2 tsp every 15-30 minutes for up to a maximum 6 doses. Discontinue if not effective. Do not exceed this dosage range due to potential toxicity from the Jamaican dogwood.

Motherwort is a really spectacular herb for labor support as it supports both the emotional being and promotes both relaxation and uterine tone simultaneously. It can be used in 2-4 mL doses every couple of hours as needed. Hops can promote deep sleep through its sedating, soporific action — reminds me of the feeling of Dorothy and company in the poppy fields in The Wizard of Oz. Speaking of poppy, California poppy is another ally for promoting rest in the anxious, exhausted laboring mom. These herbs can be used singly or in any number of combinations per the needs of the mom and her circumstances.

Sometimes, as was mentioned in the previous lesson, a woman will have poor sleep in late pregnancy due to repeated episodes of "false labor" that prevent her from sleeping night after night, and she thus runs the risk of finally entering labor exhausted. Also, sometimes a woman will enter labor after a long and tiring day. It is really important as a midwife or herbal educator to encourage adequate rest/sleep in late pregnancy to prevent this unfortunate situation.

Additional Strategies

"Labor and Birth" in *Botanical Medicine for Women's Health* presents information and techniques on the most commonly used and effective strategies for facilitating labor.

Questions to Ask

1. Do you want an epidural or other pain medication?
   Every woman has the right to choose whether she wants to experience the pain of labor – and to do so without judgment. For some women, a well-timed epidural can make the difference between a long and unproductive labor and a relatively comfortable labor – this is an individual choice.

2. Do you have fears or concerns you would like to talk about?
   Fear can cause a woman to hold back and tighten up, prolonging her labor and her experience of pain.

Empowerment and self-determination, tempered by flexibility, are perhaps the most important personal attributes with which women can enter labor.

Risks/Cautions

Any laboring woman experiencing pain disproportionate to her labor should be evaluated for an underlying medical cause, for example, fetal malpresentation, placental abruption, or uterine rupture.

Case 1: Ingrid, Sexual Abuse, and Knowing When to Hold and When to Fold

Ingrid, a 34-year old from Northern Europe, just in the US for the past year, was a homebirth midwifery client. She and her husband of 2 years met in her clothing shop back in her home country when he was on a business trip. She was an edgy-dressing, sharp, fast-talking progressive woman who wanted to go "totally natural" as most women do in her country. The pregnancy was healthy and uneventful with the exception of a few noticeable quirks that would make my apprentice and I take a quick glance at each other now and then. For example, Ingrid had the habit of calling her husband "daddy," and "big daddy." She had no relationship with her own father since she was 15 and absolutely didn't want to talk about him, yet she denied any history of sexual or (other) abuse. I honored her right to privacy and didn't push her past a point to talk about her past.

Upon the home visit at 37 weeks pregnancy, my apprentice and I took note of (and asked about) some sex toys in the bedroom (including a ball-gag), a very provocative picture of Ingrid on the living room wall – which we learned used to hang in her leather clothing and props (!) shop (not just any old clothing line…), the continued use of "daddy," and the offer from her husband for us to all sit around and smoke a joint at the home visit. Okay, red flags popping up big time in my mind – what's this woman all about? Some strange boundary and appropriateness issues here…and she just refuses to go deep into any conversation about herself….

Labor started on Mother's Day – we're not much for celebrating those calendar holidays in my family – so it wasn't too big a deal – in fact kind of nice to be welcoming a new mother and baby on that day. When I got to Ingrid's she was writing on the bed in pain. Terrible pain. "I can't take this, she whimpered to me in a soft, strained voice." Bill, her husband, said she'd been like this for about an hour. As a midwife with a lot of experience, I am pretty good at assessing, just by observation, whether a mom is in extremis from advanced active labor or from inability to cope even with early labor, and I had the sinking feeling Ingrid was in that latter category. Sure enough, cervical exam revealed that she was just 1-2 cm dilated. I told her the news and she groaned in agony as the news and a contraction caught her attention simultaneously. She flopped down on her side and began to writhe again with the short, low-intensity early labor contraction. Between contractions she totally withdrew into a shell. We spent about an hour massaging, soothing, and comforting Ingrid, but her reaction to each contraction was the same agonized response. At one point I had her look straight into my eyes for comfort, support, and encouragement and the look she returned was of the most frightened animal I'd ever seen. I asked my apprentice to take over my spot with Ingrid and I asked Bill to join me in the adjacent room for a quick chat.

"Bill," I said in an authoritative but soft tone, "what's going on here – these are early labor contractions, which can be very uncomfortable, but Ingrid's reaction is off the chain. I think there's more to the story here than you guys have let on, and for me to really reach her and help her, I need to know what's up." Bill recognized the urgency of the situation and began to share the truth and heart of the matter. "She was raped by her dad from the time she was 9 years old to 15 when she left home." I looked at him with sorrow and recognition for what she was now going through, which I had intuited but which she would not reveal out of her own pain and suffering and shame. "She's so embarrassed about it, and so angry, but she won't talk about it." "I understand," I responded quietly, and proceeded, "Bill, I know you and Ingrid really want a homebirth, but she hasn't done the work to cope with this pain – emotional and now the physical memory of her pain that labor is causing her to recall. She has a right not to feel this way, and the power to take control of this pain right now rather than feeling

victimized by it. Also, I think she will enjoy the baby more afterward if she does not associate the baby with pain, rape, and victimization. This is the first time I have ever suggested this before labor even really gets going, but I firmly think we should offer Ingrid the possibility of going to the hospital and getting an epidural. It will help her to relax and enjoy the process more consciously. But she is going to need to know that none of us judge her should she choose this route." Bill nodded and approved of the idea.

Ingrid was quick to accept the idea of going to the hospital for an epidural, though she was terrified of having a male obstetrician touch her. I told her that, with her permission, I'd explain the situation to the hospital staff and see how they could accommodate her concerns, which, upon arrival, the chief of obstetrics, with whom I spoke, readily offered to do. A woman resident provided all exams and delivered their daughter less than 24 hours later.

Days later, at a postpartum visit, Ingrid confided that she was so glad to have had the epidural, that it let her welcome her baby without all of the emotional baggage and bad memories of her abuse. She felt empowered to be able to say "NO" to the pain.

The only herbs ever used in this case were in Ingrid's relaxing, healing postpartum bath. Sometimes it's not about the herb, it's about the deeper work of healing our sexual paths so that the path to birth (literally and figuratively) can be clear and open.

Case 2: Kylene

Kylene, a 31-year old had a medically unremarkable but emotionally interesting pregnancy. Irish-Catholic and from a dysfunctional large family with alcoholic parents, she struggled with guilt over two abortions she'd had prior to this marriage and pregnancy. Her husband was aware of the abortions and not troubled, but she was plagued by anxiety that something would be wrong with this baby as "punishment." We worked through a lot of these issues during the pregnancy through visualization and journaling, but when she went into labor, the spectre of her guilt again reared its head. In spite of a tremendous amount of support and love from friends at the birth, including a massage therapist cousin, she hit an emotional wall and stopped dilating at around 6 cm at which time she began to have painful, ineffective contractions. This lasted for several hours in spite of our best efforts to have her work with positional changes, take hot showers, and pressure point massage. Kylene was becoming impatient and asking to go to the hospital for pain medication. As was always my policy, if a woman truly wanted to go to the hospital at any time, that's what we'd do, but since in her case there was no medical reasons to transport, and she wasn't having an instinctive feeling that something was wrong, I spent some time talking with her and encouraged her to try some herbs to help her to rest and relax and see if helping her to emotionally "step out of her own way" would help her resume labor progress. So we began using the following combination:

Motherwort	70% of the formula
St. John's wort	25% of the formula
Lobelia	5% of the formula

She was given 30 drops every 15 minutes for about 90 minutes, progressively relaxing all the while to foot acupressure and gentle low back massage. Finally, she fell asleep, resting for about an hour.

When Kylene awoke she felt somewhat refreshed and decided to take a shower. She asked me to keep her company in the bathroom at which time she became soft and emotional, crying about the grief of her childhood and her fears about being a "bad mother." I listened, acknowledged, and reassured her that she is a very different person than her mother, and that her husband is also a very different man than was her father and that they would be lovely parents with tremendous community support for raising their baby.

After the shower Kylene ate a hearty bowl of soup. Labor resumed within the hour. She'd had a nice long rest from contractions. Her baby was born a few hours later amidst a circle of friends singing and drumming. The birth wasn't without complications….quite a bit of bleeding that eventually did necessitate a transport to the hospital….so I'd love to say all's well that ends well. It was a tough road. I think of a bleeding heart when I think of that postpartum hemorrhage….But the point is to show the role of emotions and the work of the herbs in combination with other non-pharm healing methods….

HERBAL MEDICINE FOR WOMEN

Unit 3 Lesson 41

Postpartum Care, Breastfeeding Problems & Postpartum Depression

Learning Objectives

By the end of this lesson you will be able to:

1. Understand the major concerns and conditions facing postpartum women including uterine/vaginal bleeding, after-cramps, perineal healing, hemorrhoids, persistent lochia, breast engorgement and mastitis, sore/cracked nipples, insufficient breastmilk, and postpartum depression
2. List and describe the characteristics of the most common botanical treatments for addressing the postpartum concerns in this lesson and the associated required reading
3. List and describe adjunct approaches to the postpartum concerns in this lesson and the associated required reading

Required Reading

Botanical Medicine for Women's Health, 2nd edition (Romm)

- The Postpartum, pp 446-463
- Breastfeeding and Botanical Medicine, pp 464-484

Obstetrics and Gynecology at a Glance (Norwitz and Schorge)

- The Puerperium

Principles and Practice of Phytotherapy (Mills and Bone)

- Review relevant herb monographs from Key Botanicals list below

Key Terms

Be sure to familiarize yourself with the definitions for all key terms. These can be found in the course resources or using an on-line medical dictionary.

Baby blues
Colostrum
Endometritis
Engorgement
Episiotomy
Involution
Lochia
Mastitis
Perineum
Postpartum
Postpartum psychosis
Prolactin
Puerperium

Unit 3 Lesson 41 Postpartum Care

Key Botanicals

Students should be familiar with the botanical name, common name, actions, common uses, forms of use, general dosage ranges, side effects, and contraindications of the herbs in the following list. Ideally, you will also be familiar with taste. This information can generally be found in the course and accompanying required reading materials.

Alchemilla vulgaris

Allium sativum

Althea officinalis

Angelica archangelica

Angelica sinensis

Avena sativa

Calendula officinalis

Camellia sinensis

Capsella bursa-pastoris

Cinnamomum zeylanicum

Cnicus benedictus

Commiphora mol mol

Erigeron canadensis

Eschscholtzia californica

Foeniculum vulgare

Galega officinalis

Gossypium herbaceum

Hamamelis virginiana

Hordeum vulgare

Humulus lupulus

Hypericum perforatum

Lavandula officinalis

Leonorus cardiaca

Matricaria recutita

Melaleuca alternifolia

Melissa officinalis

Passiflora incarnata

Pimpinella anisum

Piper methysticum

Quercus spp.

Rosmarinus officinalis

Salvia officinalis

Scutellaria lateriflora

Symphytum officinale

Thymus vulgaris

Trigonella foenum-graecum

Urtica dioica

Valeriana officinalis

Verbena officinalis

Withania somnifera

Introduction

The postpartum is defined as the time extending from immediately after the birth through the subsequent 6 weeks. It is a somewhat arbitrary designation of weeks roughly corresponding with the time it takes the uterus to return to its pre-pregnant state — a process called involution. During this time a woman goes through a remarkable amount of physical, emotional, and lifestyle adjustments with certain consistent themes after the birth of a healthy baby, and with additional variables if the birth was complicated and did not have a healthy outcome for either the mother or baby. Postpartum is a time of rich lore and botanical recipes that can be identified in almost all cultures around the world. This lesson and the corresponding textbook chapters focus on the normal and expected changes and minor complaints and problems faced by new mothers. I strongly encourage you to read my book Natural Health After Birth, as it is rich with stories, tips, and wisdom (yes, I think I am finally old enough and experienced enough to say that!) gathered from my studies of birth anthropology, nearly 20 years as a midwife when it was written, and being the mom of four children of my own. The insights contained in that book will enrich your capacity to work with postpartum mothers.

Postpartum Concerns and Botanical Treatment Strategies

Postpartum Bleeding

Lochia is the discharge that results from the normal shedding of the endometrium after birth. It begins as a normal period and progressively becomes lighter and more serous over the following couple of weeks. Normal lochia in the immediate postnatal period occurs in the amount of a moderate to heavy period. Some discharge typically persists for as long as three weeks after birth. Soaking more than two large menstrual pads in 30 minutes constitutes a postpartum hemorrhage and requires medical attention. Passing large clots, or continuous bleeding even if only moderate but accompanied by abdominal tenderness, fever, or foul smelling discharge could indicate that there are retained fragments of the placenta or amniotic membranes in the uterus, and/or an endometrial infection (endometritis). Endometritis is a serious medical problem so the mother should be referred for immediate medical attention and antibiotic therapy. If bleeding persists past several weeks in the absence of infection medical advice should be sought to rule out an underlying problem. If none exists, herbs can be used, and acupuncture may also be beneficial. The problems are usually either a small amount of retained material if this is occurring in the first week, or poor uterine tone if persistent, as may occur when a woman has previously had several babies or had a multiple pregnancy.

Should there be heavy but normal postpartum bleeding, any of the botanical therapies below may be used as needed until bleeding lightens. Women who experience heavy bleeding at birth or postnatally are more likely to develop anemia, which in turn can lead to fatigue, weakness, and increased susceptibility to infection, therefore, care should be taken to supplement dietary iron intake and herbs for anemia can be incorporated into a daily protocol.

The Eclectic literature contains numerous references to herbs for uterine bleeding, including postpartum bleeding and persistent lochia. The action of many of the herbs used for uterine bleeding is to impart tone to the uterine tissue. This staunches uterine bleeding from tissue laxity, the most common reason for bleeding after birth. Assuming a medical complication has been ruled out, these remedies, which should be used with the guidance of trained practitioners, can be used for heavy postpartum uterine bleeding. Postnatal hemorrhage, considered any blood loss equal to or greater than 2 cups (500 cc) can quickly become a life threatening emergency and requires emergency medical measures.

King's American Dispensatory, 1898
Harvey Wickes Felter, M.D., John Uri Lloyd, Phr. M., Ph. D.

Erigeron. – Canada Fleabane.

Erigeron canadense

Botanical Source. – This plant is known by the various names of Colt's-tail, Pride-weed, Scabious; also improperly called by some persons Horse-weed, Butterweed, etc. It is an indigenous annual herb, with a high, branching, furrowed, and bristly-hairy stem, from 6 inches to 9 feet in height. The leaves are linear-lanceolate, and ciliate; the lower ones subserrate. The flowers are very small, numerous, white, and irregularly racemose upon the branches, constituting a large, terminal, oblong panicle. The involucre is cylindric; the rays minute, numerous, crowded, and short; and the pappus simple (W.—G.).

History. – This plant is common to the northern and central portions of the United States, growing in fields and meadows, by roadsides, and in waste places, flowering from June to September. The very small, inconspicuous ray-flowers, which are multitudinous, the elongated involucre, and the simple pappus, will serve to distinguish it from other plants of the same family. The whole herb is medicinal, and should be gathered when in bloom, and carefully dried. It has a feeble but pleasant odor, and a subastringent and amarous taste, with some acrimony, and yields its properties to alcohol, or water by infusion. Its acridity is lessened by boiling, owing to the dissipation of its essential oil.

Chemical Composition. – Dr. Dupuy, who made an examination of the plant, found it to contain essential oil (see Oleum Erigerontis Canadensis), tannic and gallic acids, bitter extractive, etc. The oil is not astringent to the taste, but has a styptic influence upon the system. It is of a colorless, or pale-yellow color, gradually becoming darker-colored, and may be procured from the plant by distillation with water.

Action, Medical Uses, and Dosage. – This plant is slightly tonic, with more active diuretic and astringent properties. The infusion has been found efficient in diarrhoea, gravel, diabetes, dropsical affections, dysuria of children, painful micturition, and in many nephritic affections. Erigeron is extremely useful for the arrest of capillary bleeding from any organ liable to hemorrhage, and to arrest profuse watery secretions from the gastro-intestinal and renal tracts. For many years it has been a popular favorite to arrest watery diarrhoea, and for the choleraic stage of cholera infantum, where the evacuations gush suddenly and copiously from the child, it will be found one of the most important agents at our command. The infusion of the fresh plant freely administered, should be used, and this not only serves to check the diarrhoea, but also supplies the body with fluid, which is required to supply the loss of water occasioned by the depleting evacuations. Its use is suggested in cholera. The infusion may be given hot or cold, or sweetened, if desired, and will prove useful if it can be retained upon the stomach. A snuff of the powdered leaves has successfully checked epistaxis; while in bronchial disorders with bloody expectoration, a syrup is effective. The same may be used to allay the cough and lessen expectoration in pulmonary consumption. Locally, an infusion is useful in leucorrhoea.

On account of its constringing power over the renal capillaries it has proven of value in hyper-urination, as in simple diabetes. The infusion is very serviceable in hemorrhages from the stomach, bowels, bladder, and kidneys. It is useful in metrorhagia when not due to retained fragments of placenta, or other foreign bodies. Passive hemorrhages where stimulation is required are the cases for its exhibition.

The volatile oil of Erigeron canadense acts as an astringent, and may be used as a local application to hemorrhoids, bleeding from small wounds, etc., likewise in rheumatism, boils, tumors, sore throat, and tonsilitis, in which it should be combined with goose-oil or some similar substance, being too acrid to use alone. Internally, it will be found useful in diarrhoea, dysentery, hemoptysis, hematemesis, and hematuria; from 4 to 6 drops of it on sugar, or dissolved in alcohol, and given in a little water, will be found a powerful remedy in uterine hemorrhage and menorrhagia, acting promptly and efficiently; it may be repeated every 5 or 10 minutes if required. The oil may be given in the profuse stage of gonorrhoea. The usual manner of administering it is in simple syrup. The plant may be given in the form of powder in doses of 1/2 or 1 drachm; or the infusion, which is the best form of administration, may be given in doses of from 2 to 4 fluid ounces 3 or 4 times a day, and oftener in bowel complaints; the aqueous extract is worthless, but the fluid extract may be given in teaspoonful doses. Specific erigeron, 1 to 30 drops; oil of erigeron, 3 to 10 drops.

Specific Indications and Uses. – Capillary or passive hemorrhages; "painful diseases of the kidneys and bladder, and in diseased conditions of the mucous membranes attended with free discharges" (Scudder); choleraic discharges, sudden, gushing, and watery, attended with thirst and cramping pain; hematuria, metrorrhagia, hemoptysis, epistaxis, and hematemesis.

Related Species. – *Erigeron annuum*, Persoon; Various-leaved fleabane, Common fleabane, White-weed. This plant, also known as *Erigeron heterophyllum*, is the Erigeron annuum of Persoon, and many other celebrated botanists. It is a biennial herb with a branching root. Stems from 2 to 4 feet high, thick, branching, hispid with scattered hairs, terminating in a large, diffuse, corymbose panicle, of large heads. Leaves hirsute, coarsely serrate; lowest ones ovate, contracted at base into a winged petiole; stem leaves ovate-lanceolate, sessile, acute, entire at both ends, highest ones lanceolate. Flowers numerous; disk-florets yellow; ray-florets capillary, white or purplish. Pappus plainly double, the outer a crown of minute chaffy-bristleform scales; the inner of scanty capillary bristles which are deciduous, or entirely wanting in the ray. This plant is common to the United States and Europe, being a very common weed in fields and waste grounds from Canada to Pennsylvania and Kentucky, and flowering from June to August (W.—G.). Properties, constituents, and uses same as those of next species (which see).

Erigeron Philadelphicum, Linné; Philadelphia fleabane. – The Erigeron Philadelphicum is the E. strigosum of Willdenow, and the E. purpureum of Aiton. It is a perennial herb, with a slender, pubescent or hirsute, leafy stem, 1 to 3 feet high, loosely corymbed at the summit, bearing a few small heads on long, slender peduncles; root yellowish and branching. Leaves from 2 to 4 by from 6 to 9 inches, thin, with a broad midrib, oblong; lower ones spathulate, crenate-dentate; upper ones oblong-lanceolate, clasping by a heart-shaped base, subserrate. Flowers numerous; disk-florets yellow; ray-florets innumerable, very narrow rose-purple or flesh color, twice as long as the hemispherical involucre. Pappus simple. The whole herb is pubescent. This plant is found growing in common with the preceding variety, flowering at the same period (W.—G.).

The medicinal virtues of this plant and the preceding are analogous, and they may be substituted the one for the other; they are, however, less astringent and more diuretic than the E. canadense. The plant should be gathered during the months of July, August, and September, or during the flowering season. They are slightly fragrant, have a subastringent, somewhat bitter taste, and yield their virtues to alcohol or to water by infusion. Mr. F. L. John obtained from 17 pounds of the dried herb but a drachm of greenish-yellow, powerful, aromatic oil, with a disagreeable, bitter, pungent taste and sp. gr. 0.946 (Amer. Jour. Pharm. XXVII, 105). Diuretic, astringent, and tonic. The infusion is very efficient in affections of the bladder and kidneys, dysuria, especially of children, painful micturition, various forms of dropsy, gravel, and in hydrothorax connected with gout. It has also been recommended as a diaphoretic in rheumatism, fevers, colds, etc., and as an emmenagogue in suppressed menstruation; and has been used with advantage in gout, some forms of cutaneous eruptions, and diabetes. Dose of the infusion, from 2 to 4 fluid ounces 3 or 4 times a day.

Herbs to consider for uterine bleeding include

Achillea millefolium

Alchemilla vulgaris

Angelica archangelica

Capsella bursa-pastoris

Cinnamomum zeylanicum

Erigeron canadensis

Gossypium herbaceum

Hamamelis virginiana

Leonorus cardiaca

Quercus spp.

Urtica dioica

Lady's Mantle Blend

Combine the tinctures of the following in a four-ounce bottle:

Alchemilla vulgaris	30 mL
Gossypium herbaceum	30 mL
Capsella bursa-pastoris	15 mL
Cinnamomum zeylanicum	10 mL
Vegetable glycerine	15 mL
Total	100 mL

Dose: 1/2-1 teaspoon as needed until the bleeding stops, up to 8 teaspoons.

Yarrow and Shepherd's Purse Tea

Combine:

Achillea millefolium	1/2 ounce
Capsella bursa-pastoris	1/2 ounce dried

To prepare: Steep 4 tablespoons of the blend in two cups of boiling water for 20 minutes. Cover while steeping. Strain and drink lightly sweetened if desired.

Dose: 1/4 to 1 cup as needed, up to 4 cups.

Cinnamon and Erigeron Formula

Based on the prescriptions of Dr. Ellingwood, the following can be used to quickly staunch heavy postpartum bleeding.

Mix the following tinctures:

Erigeron canadensis	20 mL
Cinnamon	10 mL
Total	30 mL

Dose: 1/2 teaspoon as needed, up to six doses over two hours.

Perineal Care

There are many herbs that can be used to soothe tender perineal tissue, heal tears and episiotomies, reduce inflammation, decrease hemorrhoids, and prevent perineal infection. The postpartum bath is a tradition that my clients have enjoyed for over 20 years. Preparing the bath is as simple as making a giant pot of tea, and the medicinal liquid can also be made into compresses and peri-rinses as directed below. The bath can be given as soon as an hour after birth as long as there is no uterine infection, and is generally repeated once or twice daily for three to five days after birth. The baby can accompany the mother into the herbal bath, which also promotes healing of the umbilical site. I generally have to refill postpartum bath herb orders several times as women find them so soothing!

Herbal Bath I: Postpartum Delight

A blend of beautiful and fragrant blossoms that is uplifting, soothing, healing, and antiseptic.

Mix these herbs:

comfrey leaves*	2 ounces
calendula flowers	1 ounce
lavender flowers	1 ounce
sage leaf	1 ounce
myrrh powder	1/2 ounce
sea salt	3/4 cup

Directions: Bring 4 quarts of water to a boil. Turn off heat, and place 1 ounce (approximately 1 large handful) of the above mix (not the salt) into the pot. Steep, covered, for 30 minutes. Strain the liquid well with a fine mesh strainer, and discard the herb material. Add 2 quarts of liquid to the tub, along with the ¾ cup of salt. Reserve the remaining liquid for another bath or for compresses or a peribottle.

Herbal Bath II: Deep Healing Bath

Strongly antiseptic and astringent, perfect for healing trauma to the perineum, including tears and episiotomies.

Mix:

dried comfrey leaf*	1 ounce
yarrow blossoms	1 ounce
dried sage leaf	1 ounce
dried rosemary leaf	1 ounce
large fresh bulb of garlic	1
sea salt	1/2 cup

Directions: Peel all the garlic cloves and place them in a blender with two cups of lukewarm water. Blend at high speed until you have a milky liquid and the garlic is completely pulverized. Strain through a fine mesh strainer. Bring 6 cups of water to a boil and turn off heat. Add 1 ounce of the dried herb blend to the pot and steep for 30 minutes. Strain the liquid and discard the herb material. Add 1 cup of the garlic "milk" and 4 cups of herb tea to the bath, along with 1/2 cup of salt. Reserve the remaining liquids for a subsequent bath. Do not use the garlic milk in a peribottle or compress — it would be too irritating. The tea, however, can be used as such.

For herbal compresses: Simply soak a washcloth in the herbal tea and apply warm or cold to the perineum as needed to reduce tenderness and swelling.

For peri-rinses: Purchase a peri bottle, a plastic squeeze bottle, from any pharmacy and fill with the strained tea of your choice. Squeeze warm or room temperature over your perineal area as you urinate. This significantly reduces inflammation and stinging.

* Note: It has been suggested that Pyrrolizidine alkaloids (PA), known to cause hepatic damage when taken internally, can also be absorbed through skin abrasions and open wounds. There have been no case reports of hepatotoxicity from the use of comfrey on perineal tissue after tearing, episiotomy or suture repair. Plantain leaves can be used as a substitute if there is concern or the herb simply omitted; however, no adverse effects are expected from short-term topical exposure over a week of postpartum baths for either mother or infant.

Aching Muscles

Postpartum moms may find that certain muscle groups that were used during labor – particularly the arms, back, or legs – are sore. A relaxing herbal bath (see above) and a good rest can bring great relief, while a deep massage within a few days after birth is sure to be welcome.

After Birth Massage Oil

This simple combination, massaged into aching muscles, can bring great relief, whether or not you've just had a baby:

arnica oil	1/2 ounce
essential oil of rosemary	1/4 ounce
essential oil of wintergreen	1/4 ounce
almond oil	3 ounces

Mix well in a small plastic squeeze bottle.

Apply as needed, shaking well before each use. Store in a cool dark place.

After Birth Cramps

Usually within 30 minutes of the birth of the baby, the placenta is delivered, at which time the uterus weighs over 2 pounds. Its weight is reduced by 95 percent over the next six weeks. This process, known as involution, occurs through uterine contractions, often referred to as "afterpains" or "after birth pains," literally squeezing it back into shape and size. Afterpains generally begin within 12 hours of the birth, and may be quite exquisite, some women complaining that they ache more than labor contractions. They frequently occur with increasing intensity with each subsequent baby, as each pregnancy causes the uterus to become slightly more stretched. The purpose of the cramps is to clamp the uterus down, not only restoring it to its original size and shape, but also preventing excessive bleeding. This occurs because the uterine blood vessels are interlaced with the uterine muscle fibers. Contraction of the uterine muscle fibers leads to enough constriction of the uterine blood vessels to control bleeding. Nursing the baby will trigger the cramps because breastfeeding also stimulates the release of oxytocin, a naturally occurring hormone in the body that causes uterine contractions (Pitocin is synthetic oxytocin), and is an excellent way to speed the process. They are almost always completely gone by 72 hours after the birth, and often well before that. Doctors sometimes prescribe acetaminophen (i.e., Tylenol) or an anti-inflammatory such as Ibuprofen.

Midwives and herbalists have long prescribed herbs for the relief of afterpains. Try the following if you have bothersome cramps and want a natural therapy. These herbs are not contraindicated for use while breastfeeding.

Matricaria recutita is a gentle herb for easing aches, cramps, and spasms. Steep 1 tablespoon of chamomile blossoms in 1 cup of boiling water for 10-15 minutes. Cover while steeping. Strain and drink warm, lightly sweetened if desired. Dose: 1-4 cups daily, as needed.

Nepeta cataria shares many of the same principles as chamomile and may be used instead of chamomile, or in combination. Prepare as for chamomile, or to combine, use 1/2 tablespoon of each and prepare as above.

Leonorus cardiaca: As the name of this herb implies, it is meant for mothers. "Wort" means "healing herb." The Latin botanical name, *Leonorus cardiaca* means "lion hearted," and many herbalists interpret this as meaning it provides a certain strength and stoutness to the character when there is depression, anxiety, or irritability. It is an excellent tonic for both the uterus and the heart, tonifying the former and reducing palpitations in the latter. It also takes the edge off of spasmodic uterine cramps, making it well placed as a pain relieving uterine tonic for afterpains. It is quite bitter, and is thus better used in tincture form. I recommend that my clients prepare a cup of catnip tea and add 1 teaspoon of motherwort tincture after the tea has been steeped and strained. Dose: 1/2-1 teaspoon up to 4 times daily. Analgesic herbs listed in the lesson in pain in labor can also be incorporated, taking care to avoid the toxic herbs *(Gelesmium, Pulsatilla)*.

Note: Severe cramps accompanied by uterine tenderness, fever, or foul smelling discharge can be a sign of serious uterine infection. Should you experience these symptoms, seek medical care immediately.

Hot Rice Packs

Hot rice packs are easy to make, can be used during labor for lower backache, and can be used postpartum for afterbirth pains in place of a hot water bottle.

Method 1: Place enough rice in a long tube sock to fill it 2/3 of the way. Firmly tie the top closed with a cotton string and place in the microwave for two minutes on medium heat. Apply to crampy areas as needed.

Method 2: Cut a piece of cotton fabric into a rectangle, 36 inches long and 4 inches wide. Fold in half so it is 18 inches long and 4 inches wide, then sew the two long ends closed with close stitches. Fill 2/3 of the way with rice and sew the last side closed firmly. Heat in the microwave and apply as above.

Either sac can be reheated and reused as needed. Optional: Add 1/4 cup of lavender blossoms to the rice and mix well before placing in sac. When heated the lavender will emit a soothing and pleasant fragrance.

Mother Roasting

According to traditional Chinese medicine, heat is highly significant for the recovery of a woman who has recently given birth. One of the three major factors considered important for the health of postpartum women is "sparing the exterior." According to traditional Chinese herbalist Andy Ellis, this means protecting against wind and avoiding cold drafts. Childbirth is thought to deplete what in Chinese is called the wei chi. The wei chi is the body's protective immune capacity, specifically found on the surface of the body and in the lungs. Special herbs are given to protect the woman and nourish the wei chi, and the woman is expected to remain indoors for one month after birth. Midwife Raven Lang wanted to find a way to provide her clients with the type of "Mother Roasting" that her research on postpartum care revealed women in Southeast Asia were routinely treated with after birth. Combining her knowledge as a practitioner of traditional Chinese medicine (TCM) with her experience as a midwife, she discovered that fire is an element in TCM that is considered essential for restoring balance after birth, and looked for TCM models of care that might apply to mothers in the West. While I believe

that the body has an intrinsic ability to restore balance after birth if nutrition and lifestyle have been healthy during the pregnancy, many women nonetheless love the warmth and soothing feeling of a moxabustion treatment.

Moxabustion for Essential Postpartum Care

In TCM, there is an area of the body known as the Ming Men. This literally translates as Life Gate, or Life Gate Fire, and correlates to the TCM concept of the kidneys, which are said to govern the functions of reproduction, sexuality, growth, and decline. It also controls the relaxation of the pelvis, which allows the baby to be born. According to herbalist, acupuncturist, and midwife Valerie Appleton, "The Ming Men, being a 'gate' opens and closes. To give birth, the Ming Men must open, and proper recovery necessitates closure of the Ming Men." Cesarean delivery also causes the Ming Men to be open. Rest and heat are the two cardinal factors that facilitate proper closure of the Life Gate.

Moxa is an herb called Chinese Mugwort *(Folium Artemesia argyi)*, traditionally used internally for the treatment of gynecologic problems. For external use it comes in the form of a rolled stick, much like a cigar, but completely covered by a fine linen paper. The end of this stick, when lit and held close to the skin, sends a deep, penetrating warmth in to area. The technique of moxabustion was featured in an article in the *Journal of the American Medical Association* (November 11, 1998), in which researchers concluded that the technique is reliable for turning babies from the breech to the head down position. No research has yet been published on its use for postpartum care, but midwives who incorporate this technique into their clinical practices, and mothers who have received this technique, can attest to its value.

Giving a Moxabustion Treatment

Note: See Resources for information on obtaining moxabustion products.

1. Have the mother lie in a comfortable position on her side or belly. Use pillows to support her if her breasts are sore or enlarged from breastfeeding. Make sure the room is warm.

2. Provide some ventilation, but do not allow the mother to receive a chill or draft. A window may be slightly open on the opposite side of the room, or use "little smoke" moxa in cold weather. It is more difficult to light, but does not emit as much smoke.

3. Peel the outer paper wrapper off of the moxa stick. Light the moxa stick with the inner paper left on it. Blow on the end until it is a burning ember. Roll of any excess ash in an ashtray or dish until the tip of the moxa becomes slightly cone-shaped.

4. The area on the body you want to treat extends over the sacrum on the back, and the area from just above the pubic bone on the front to about an inch below the navel to 3 inches on either side of the midline of the lower abdomen. (See *Botanical Medicine for Women's Health*)

5. Holding the moxa stick 1-2 inches over the correct area, begin to move the stick in tiny circles about 2 inches in diameter, until the area becomes warm and slightly pink. Then move to an adjacent spot until the whole area has been treated. Do not touch the mother with the moxa, and periodically knock ashes off

into your ashtray or dish to prevent them from falling on her. Do not treat the point of burning or stinging pain, and instruct the mother to tell you if any area is becoming too hot.

6. Continue treating the back for 15 minutes, then "massage the heat inward" for several minutes before proceeding to treat the abdomen.
7. A woman may give herself a moxa treatment on the abdomen if no one is available to do the treatment on her back.
8. To extinguish the moxa, place it upside down into a small dish of sand, run the tip under water until not lit, or use a specially made moxa extinguisher. Use fire safety precautions when treating with moxa.
9. Begin treatments the first day after birth, and continue daily for one to two weeks.

If you choose not to use moxabustion, but want to practice some form of FireRest for the mother, a simple way is to just keep the mother very warm – though not overheated – in the early postpartum days. Keeping the temperature in the house or apartment warm is the easiest way to do this. Take care that neither mom nor baby become overheated or dehydrated by giving plenty of fluids to the mom, allowing the baby to breast feed freely, and not overbundling mom or baby.

Insufficient Milk Supply

Most women, with adequate emotional support, plenty of fluids, rest, and good nutrition, will be able to successfully breastfeed without the need for herbs. Should there be concern, or should the mother wish to augment or enrich her milk supply, the following herbs are typically recommended. Known as galactagogues, this class of herbs has traditionally been used for improving lactation.

Trigonella foenum-graecum has long been used to encourage milk production, and can be used as a tea taken warm while trying to establish or improve the milk supply. It may be taken alone or in combination with other galactagogues and nervines, and may also be used in tincture form.

Verbena officinalis, in addition to being a nervine, is listed in many herb texts as an herb that promotes lactation. Again, as it is bitter, it is best used in tincture form. It combines very well with vitex, ashwaganda, and licorice root in tincture form.

Foeniculum vulgare is another herb classically listed among those that promote breastmilk. Its mild, pleasant taste makes it a palatable tea, or a pleasant flavoring for other more bitter tinctures used for promoting milk, as that described under vervain and vitex.

Urtica dioica is perhaps my favorite herb to use for enriching and enhancing breastmilk production, while providing optimal nutrients and energy for the mother. I often recommend it in large quantities – as much as a quart of strong tea daily, as an adjunct part of the diet, but even a cup or two daily, several times a week, will bring significant benefit to the overall well-being of the mother. Nettles can also be eaten as a fresh green, being careful of the sting during preparation. The sting, however, is destroyed upon cooking.

Taraxacum officinale, much like nettles, is a highly nutritive green plant, being rich in trace minerals and iron. The best way to take dandelion leaf to promote breastmilk is as a fresh green vegetable cooked with a bit of lemon and butter for flavor, taken several times per week. The fresh spring greens are the least bitter and make the most delicious eating!

Cnicus benedictus has long been used to promote breast milk in new mothers, and it has properties that allow it to allay uterine bleeding, making it an all-around generally beneficial herb for the postpartum mother in the first few weeks. It can help offset mild irritability, and is also a good general digestive tonic, particularly when there is sluggish digestion. As it is bitter, tincture is generally recommended.

Goat's rue: These herbs can be used (separately or in combination with each other or other herbs) for difficulties with milk production (goat's rue) and let down (hops). Goat's rue is empirically considered a powerful galactagogue. The use of goat's rue, however, is somewhat controversial because of documented toxicity in sheep who grazed upon it. This is not a likely concern in women consuming moderate amounts of the tea for a short duration of time compared the volume of ingestion in grazing animals. It is a popular galactagogue in France, and no human toxicity reports have appeared in the literature. Galega may also have hypoglycemic effects and is sometimes included in anti-diabetic formulae.

Hops: A familiar herb for its sedative nervine properties, hops is also useful when there are difficulties with letdown. It can be combined with other herbs to encourage letdown, for milk production, or for relaxation.

Mother's Milk Tea Blend

A tasty and soothing blend of herbs for new moms, you might find yourself drinking this as a comfort tea for years to come. Children love it, too.

dried chamomile flowers	1 ounce
dried catnip	1 ounce
fennel seeds	1/4 ounce
dried lavender flowers	1/8 ounce

To prepare: Combine all the herbs. Put 1 tablespoon of the mix in a cup and fill with boiling water. Cover the cup and let steep for 10 minutes. Strain and drink plain or slightly sweetened. Dose: 1-3 cups daily

Breast Engorgement and Mastitis

Lactiferous ducts can easily become blocked when they become engorged with milk or from physical constriction, which can occur from sleeping on the breast when it is full, or from wearing a too-snug bra. They are also more common when women have been "over-doing it" and running around too much without attention to adequate rest, fluids, and nutrition. Plugged ducts can become inflamed quickly and unexpectedly, causing severe discomfort. Some localized discomfort, a hard red knot, or streaky red area on your breast where the discomfort

is centered are the first symptoms you're likely to notice. Fever, chills, malaise, dizziness, nausea, and general flu symptoms then quickly follow. This condition is commonly referred to as "mastitis," or breast infection. It is preventable, and if caught early, it can usually be cleared within twenty-four hours. Untreated, it can eventually lead to a breast abscess with a more serious systemic infection. However, in 16 years of practice, I have never had to step beyond the following simple and effective protocol. Have the mother follow the protocol in its entirety.

To treat breast engorgment and mastitis

- Rest, fluids, and nourishment, along with frequent nursing of the baby on the affected side, are the primary treatments for a plugged duct and the best prevention and cure of mastitis. With the following suggestions you should notice improvement in six to twelve hours and complete recovery within twenty-four hours. Your client may notice slight discomfort (a sore or bruised feeling) for up to several days longer. If so, continue the internal remedies until completely recovery is achieved.
- Have your client drink a tall glass of water (warm or at room temperature) every waking hour of the day. This is incredibly important! She can sip on catnip, chamomile, or other gentle nervine tea to ease stress, tension, and discomfort.
- Nourishing, light foods are especially important. Emphasize hearty grains and vegetable soups.
- The mother must nurse her baby often on the affected side in order to drain the ducts thoroughly and to flush the breast. It may feel uncomfortable to suckle the baby on the painful breast, but doing so will shorten the duration of the blockage. Nursing the baby on the side with the infection is perfectly safe. However, if an abscess occurs anywhere near the nipple, nurse on the other breast and hand-express from the affected side.
- Use compresses and tub soaks to apply moist heat to the breasts. Have the client fill a sink or basin with hot water and hang the breast into it while gently massaging the blockage toward the nipple. Ginger root, chamomile, marshmallow root, burdock root, and slippery elm infusions can be used as compresses.
- Apply a poultice of freshly grated raw potato (just a regular baker or boiler will do) two to three times a day. This is a wonderful remedy because nearly everyone has a potato, and it is remarkably effective in reducing pain, blockage, and inflammation. Remove the poultice when it becomes warm, usually after about twenty minutes, and repeat at least three times daily.
- Take 1/2 to 1 teaspoon of echinacea tincture every two to four hours depending on the severity of the problem. Continue for at least twenty-four hours after all signs of illness are past. This is perfectly safe for the baby.
- Take 500 milligrams of vitamin C every two to four hours. The baby's poops become looser, but this is of no concern.
- If there is fever, drink hot elder blossom and spearmint infusion (1/2 ounce of each herb steeped for twenty minutes in a quart of boiling water). Keep drinking it until a sweat is broken, up to 2 quarts. Encourage the mother to stay warm and avoid chill.

Sore Nipples

Whether you are a first time mom or a champion nurser, you might experience sore nipples during the first few days of getting accustomed to nursing your baby. To prevent sore nipples, be sure that the baby is positioned well on your nipple, with a good mouthful of nipple not just hanging on the edge of the nipple ("cliff-hanging"), avoid breast pads and tight bras which can both keep moisture trapped near the nipple and lead to thrush, and allow your nipples to be exposed to air and sunlight for 20 minutes each day to keep them dry and prevent thrush. If your baby has oral thrush this must be treated, along with treating your nipples, as you will pass it back and forth to each other, and it will make breastfeeding an extremely painful experience for you.

To soothe sore nipples

- For cracked, dry, red nipples, regularly apply herbal salve made with comfrey root and calendula until your nipples become moisturized and heal.
- Use cocoa butter, almond oil, vitamin E, or lanolin on your nipples. Some folks are allergic to lanolin, so discontinue its use if you notice a reaction. Wipe off any residue before you nurse your baby.
- Aloe vera gel applied to your nipple brings cooling relief and helps heal cracks and cuts. It is intensely bitter, so you may need to rinse your nipples before nursing.
- Expose your nipples to fresh air and sunlight, or at least the latter, for a minimum of twenty minutes a day. If cold or privacy are problems, sunlight coming in through the window is adequate.
- If your nipples are painfully sore when you feed your baby, try nursing on one side for a day while you treat the other; then switch sides. This will not interfere with nursing and may give your nipples the needed time to heal.

Treating Thrush in Mom and Baby

A major cause of thrush, an infection with Candida, or yeast, in both mom and baby is the use of antibiotics during labor or after the birth. Thrush can also be picked up during a vaginal birth by a baby born to a mom with an active vaginal yeast infection, and this is then transmitted to the mom's nipples via the baby's mouth. Yeast thrives in warm, moist, dark environments. Typical medical treatment involves the use of antifungal drugs such as Nystatin, which should be reserved for extreme intractable cases. The use of oral application of gentian violet is commonly recommended, but may be associated with oral cancer and is thus best avoided.

Treating Your Nipples

- Wash your bras after daily use
- Dry on a high temperature or in the sun

- Avoid use of breast pads and shields
- Expose your nipples to direct or indirect (through a window) sunlight for 20 minutes daily
- Go shirtless for 20 or more minutes daily to allow air to circulate to nipples
- Use excellent hygiene, keeping nipples clean and dry
- Avoid eating high sugar foods, as these contribute to yeast development
- Apply plain unsweetened yogurt or apple cider vinegar (2 tbs vinegar to 1/2 c of water) to the nipples after each nursing
- Apply black walnut tincture to the breast 4 times daily. This stains, so be careful about clothing and bedding. Dilute tea tree (melaleuca) tincture may be used topically as an alternative to black walnut.
- For severe cases, apply a paste of aloe vera gel and goldenseal powder to the nipples after each nursing. Rinse off before each nursing as is very bitter and not intended for consumption by your baby.
- Use vitamin E oil or calendula oil on the nipples to heal cuts or sores.
- Continue all treatments until the problem is cleared up.

Treating Thrush in the Baby

Thrush must also be treated in the baby to prevent it being passed back and forth between you. Non-medical treatments can be effective, and are safer. For severe thrush, seek the care of your pediatrician.

- Swab the baby's mouth 4 times daily with a cotton swab soaked in black walnut tincture (do NOT substitute tea tree tincture). Do not replace the cotton swab into the bottle of tincture after it has been in the baby's mouth.
- Using your finger, swab the baby's mouth 4 times daily with plain, unsweetened yogurt, allowing the baby to swallow some. This promotes the growth of health flora, which control the growth of yeast.

Depression

Every woman who has been pregnant, given birth, and been through the postpartum will tell you that there is a huge range of emotions, from the happiest to the most desperate, that one goes through in the course of these experiences of becoming a mother. Most women, in the days, weeks, and months after birth will go through moments – or longer – of extremes of emotion. This is normal and to be expected. For a variety of reasons ranging from hormonal causes to psychosocial influences, a small percentage of women will experience the depths of the more painful and difficult of these emotions, sometimes for months at a time. The range of emotions that women might experience can be classified on a continuum ranging from momentary outbursts of sadness to baby blues to postpartum depression, with the rare and extreme form of severe postpartum depression being known as postpartum psychosis.

Occasionally I get a client in my midwifery practice who remembers stories of a family member – a grandmother, great-aunt, or perhaps even her own mom if the client is in her 40's or older – who was institutionalized after becoming a mother, the common treatment until not long ago, for extreme depression after birth, but before postpartum depression was recognized as a treatable syndrome in its own right. Such stories can have a haunting effect on a new mother – or a new father if he remembers stories from his own family and is afraid of this happening to his wife. Fortunately for women now, post-partum depression is being recognized as a real experience and is considered "100% treatable".

The baby blues is characterized by periods of weepiness, anxiety, and irritability that generally occur between 3 and 10 days after birth. It lasts from several hours to several days. Studies indicate that anywhere from 30 to 80 percent of all women will experience the baby blues, and it is primarily attributed to a significant drop in hormones that occurs after birth. It is aggravated by fatigue and low blood sugar. Feelings of disappointment about the birth, or lack of support in the postpartum also contribute to baby blues. The best treatment for baby blues is for women to express their feelings, ask for more support, get plenty of rest, especially when the baby rests, eat optimally, and drink plenty of fluids. Relaxing herbs might be helpful to take the edge off of jangled nerves. Consider the following tincture blend.

Mother's Nerve Support

motherwort tincture	1/2 ounce
vitex (chaste tree) tincture	1/2 ounce
passion flower tincture	1/4 ounce
skullcap tincture	1/4 ounce
lemon balm tincture	1/4 ounce
lavender tincture	1/4 ounce

Combine all of these ingredients into one blend.

Dose: 1/2 to 1 teaspoon as needed, up to 4 teaspoons daily for two weeks.

Postpartum depression (PPD), a more severe problem than just "baby blues," is thought to affect between 4 and 28 percent of all mothers. Despite its prevalence, it is not well understood. PPD can occur anytime in the first year postpartum, but may be prolonged beyond this time. Breastfeeding mothers may be significantly less likely to develop postpartum depression than non-breastfeeding mothers. Symptoms of PPD may include irritability, depression, guilt, hopelessness, chronic exhaustion, despair, feelings of inadequacy, insomnia, agitation, loss of normal interests, joylessness, difficulty relaxing or concentrating, memory loss, confusion, inability to function, emotional numbness, inability to cope, irrational over concern with baby's well-being, thoughts of hurting oneself or baby. It is the duration, severity, and complexity of the symptoms that distinguish postpartum depression from the baby blues. Few women experience all of these symptoms.

Women with postpartum depression may also be consumed by the terrible feeling that they will always be this way – that the depression and anxiety will never go away. They may feel extremely detached from their family, including their husband, baby, and other children. It can be terrifying for women to feel this way and to not know when, if ever, this will end. They may also be horrified at their thoughts of hurting the baby, causing them panic

and anxiety, leading them to distance themselves from the baby, and exacerbating feelings of inadequacy as a mother. For most women, an actual diagnosis of postpartum depression can be a tremendous relief – putting their experience into the context of an illness for which there is a treatment and cure, and which will eventually end. It can provide a framework that helps them, as well as their family, begin to make sense of what is happening

Too often, postpartum depression is dismissed as "just the baby blues" leaving women who need treatment and care with none, and prolonging the terrible desperation they feel. Interestingly, it is often women who did not receive adequate support in the first place, that develop severe PPD, so seeking help becomes all those more critical for these women. Even help as simple as talking with a therapist can lead to significant improvement in PPD. In one study, interpersonal psychotherapy was demonstrated to reduce depressive symptoms, improve adjustment, and was shown to be an alternative to drug therapy, especially for breastfeeding mothers (O'Hara et al 2000).

Symptoms of Postpartum Depression

- irritability
- depression
- guilt
- hopelessness
- chronic exhaustion
- despair
- feelings of inadequacy
- insomnia
- agitation
- loss of normal interests
- joylessness
- difficulty relaxing or concentrating
- memory loss
- confusion
- inability to function
- emotional numbness
- inability to cope
- nightmares
- clumsiness
- loneliness
- fear
- frequent crying or inability to cry
- anxiety or panic attacks
- mood swings
- withdrawal from social contacts
- lack of attention to appearance
- decreased appetite or extreme cravings
- thoughts of hurting oneself or baby
- irrational concern with baby's well-being

The biggest problem in the treatment of postpartum depression is the uncertainty about causative factors. Most often in the medical literature and in the minds of physicians, PPD is attributed to hormonal changes after birth, and other biochemical origins such as thyroid insufficiency (hypothyroidism), which is commonly found in the 2 to 5 months after birth. It is also frequently attributed to a "tendency to depression". Women, however, are more likely to consider a "wide range of social, physical health, and life event factors as contributing to their experience of depression". One study, conducted in Switzerland confirms women's beliefs on the origins of PPD. This study found that among the most significant risk factors for postpartum depression are social or professional difficulties, deleterious life events, early mother-child separation, and negative birth experience. Further, a study looking at the impact of a supportive partner in the treatment of PPD found a significant decrease in depressive symptoms in the group where the partner provided the mother with significant support. Yet another study indicated that women with postpartum depression "reported less practical and emotional support from their

partners and saw themselves as having less social support overall." Clearly, adequate social support is an important variable in preventing postpartum depression.

400,000 women each year suffer from postpartum depression…

Birth experience may have a dramatic impact on a woman's experience of herself and her postpartum recovery or tendency to depression, yet is generally overlooked. One study indicates that assisted delivery (cesarean, forceps, and vacuum extraction) were associated with higher rates of postnatal depression, as were bottle-feeding, dissatisfaction with prenatal care, having unwanted people present at the birth, and lacking confidence to care for the baby themselves after they left the hospital. A study by Edwards et al. (1994) indicates that there is a significant increase in rates of postpartum depression among women who have had cesarean sections.

Nutrition can also have an impact on postpartum depression, particularly of essential fatty acids, protein, B vitamins, zinc, and iron. Women who have experienced significant blood loss at birth may be predisposed to depression due to anemia and its accompanying increased fatigue, and tendency to infection. Low blood sugar can have a dramatic effect on mood; therefore postpartum women must ensure adequate caloric intake through a well-balanced diet to minimize the risk of depression due to hypoglycemia.

Treatment of Postpartum Depression

In her excellent book, *Mothering the New Mother,* Sally Placksin quotes the work of medical anthropologist Dr. Laurence Kruckman who has studied postpartum traditions in many cultures. Dr. Kruckman concludes "that where there was support for the new mom, including rites of passage and healing ceremonies, there was also…a cushioning effect that helped ease her adjustment through this transitional time in her life." Perhaps one of the most important factors for both preventing and treating women with postpartum depression is to rally around women with abundant and generous support. Secondary to this, women with postpartum depression can seek the emotional support of counselors who are trained to help women cope with postpartum depression and come out the other side. Extreme treatments such as hospitalization are rarely necessary, however, pharmacotherapy in the form of antidepressant drugs, hormonal therapies, or medications to aid sleep are commonly prescribed. Drug therapy is only continued for the duration of the condition, which is not permanent. Medications can be helpful for many women, but most women would prefer not to take medications when caring for or breastfeeding a baby. This is a very personal decision and should be based on a careful assessment of the risks and benefits of both drug therapies. Care must be taken when using any drugs or herbs for breastfeeding mothers.

Alternative therapies can constitute effective treatment for mild to moderate depression. Nutritional therapies, which were mentioned above, include improving overall caloric intake through a well-balanced diet, increasing protein consumption, and ensuring adequate intake of vitamins and minerals through foods and supplemented with a prenatal vitamin. The addition of essential fatty acids in the form of either a fish oil supplement or evening primrose oil (2500 mg daily) can be helpful, as can a B-complex supplement. Inadequate fluid intake can aggravate depression – be sure to encourage your client to drink at least 2 liters of water each day. Encourage your client to avoid caffeine, chocolate, coffee, and sodas, and keep sugar consumption to a minimum.

Herbal Therapies for PPD

The recommendations that follow are based on known safe clinical use from herbal practitioners, combined with known issues of herbal contraindication for nursing mothers. Unfortunately, little, if any, research has been done into the safety and efficacy of using these herbs for postpartum depression or even simply during lactation. As with any therapies, use caution and common sense. If the condition persists or worsens in spite of herbal treatments, discontinue the herbs and seek medical advice.

Herbs can be used for a variety of aspects of PPD, including the treatment of depression itself, reduction of anxiety, improvement of sleep, herbs that support and regulate hormones, and as general nerve tonics. The following sections categorize the actions. Listed in parentheses next to the herb is the form in which the herb is generally recommended. You can combine herbs from the following categories, or choose from the sample formulas that follow.

Nervous System Relaxants

Avena sativa (tincture, oats as food)

Scutellaria lateriflora (tincture)

Passiflora incarnata (tincture)

Melissa officinalis (tea, tincture)

Verbena officinalis (tincture)

Leonorus cardiaca (tincture)

Lavandula officinalis (tea, tincture)

Matricaria recutita (tea, tincture)

Tilea spp. (tea, tincture)

Herbs to Reduce Anxiety

Hypericum perforatum (tincture)

Passiflora incarnata (tincture)

Valeriana officinalis (tincture)

Matricaria recutita (tea, tincture)

Leonorus cardiaca (tincture)

Zizyphus spinosa (tea, tincture)

Nervous System Tonics

Eleutherococcus senticosus (tincture)

Panax ginseng (tea, soup, tincture)

Panax quinquefolium (tincture)

Withania somnifera (tincture)

Hypericum perforatum (tincture)

Avena sativa (tincture)

Verbena officinalis (tincture)

Antidepressants

Hypericum perforatum (tincture)

Ginkgo biloba (tincture)

Eleutherococcus senticosus (tincture)

Panax ginseng (tea, soup, tincture)

Rosmarinus officinalis (tea, tincture)

Herbs to Promote Sleep

Matricaria recutita (tea, tincture)

Lavendula officinalis (tea, tincture)

Passiflora incarnata (tincture)

Scutellaria lateriflora (tincture)

Hormonal Regulation

Vitex agnus castus (tincture)

Angelica sinensis (tea, soup, tincture)

Peony lactiflora (tea, tincture)

Blood and General Tonics to Build Energy and Stamina

Angelica sinensis (tea, soup, tincture)

Panax ginseng (tea, soup, tincture)

Rehmannia glustinosa (tea, soup, tincture)

Polygonum multiflorum (tea, tincture)

Peony lactiflora (tea, tincture)

Urtica dioica (tea, tincture, food)

Schizandra chinensis (tincture)

Glycyrrhiza glabra (tea, tincture)

Sample Formulas for Treating Postpartum Depression

The following are formulas that can be used by nursing and non-nursing mothers for the treatment of postpartum depression. You can also create your own formula picking herbs from the categories above, and combining them to suit your specific needs.

Tincture Formula 1

Ginseng	10 mL
St John's wort	25 mL
Licorice	15 mL
Ashwaganda	30 mL
Blue vervain	20 mL
Total	100 mL

Dose: 5 ml (1 tsp) with water, 3 times daily

Recommended by Simon Mill and Kerry Bone in Principals and Practice of Phytotherapy, specifically for the treatment of PPD caused by hormonal effects and adrenal depletion. They also recommend an additional 2 mL of vitex upon rising each day.

Tincture Formula 2

St John's wort	20 mL
Eleuthero	20 mL
Kava kava*	10 mL
Motherwort	10 mL
Vitex	10 mL
Rosemary	10 mL
Schizandra	10 mL
Licorice	10 mL
Total	100 mL

Dose: 5 mL (1 tsp) with water, 2-3 times daily

When anxiety and depression are the prominent symptoms. Also when there is lack of mental clarity.

* Kava can be used short term for acute anxiety, insomnia, or depression. Discontinue after 10 days. It has recently been associated with cases of heptatotoxicity, so great care should be used when giving to nursing mothers, to avoid problems in the nursing baby.

Tincture Formula 3

Blue vervain	25 mL
Motherwort	25 mL
Skullcap	25 mL
Nettles	25 mL
Total	100 mL

Dose: 5 mL (1 tsp) with water, 2-3 times daily

For general irritability and weepiness.

Tincture Formula 4

Skullcap	20 mL
Passionflower	30 mL
Chamomile	20 mL
Linden	20 mL
Lavender	10 mL
Total	100 mL

Dose: 5 mL (1 tsp) with water, 2-3 times daily, plus 1/2 teaspoon every 30 minutes for 2 hours before bed.

Primarily for insomnia and exhaustion related to insomnia.

Pelvic Floor Weakness, Uterine Prolapse, and Urinary Incontinence

A number of women will experience a prolapse, or slipping down, of the organs in the pelvic cavity, after birth. Most commonly this happens to the uterus (uterine prolapse) or bladder (cystocele). Treatment of these conditions also requires pelvic floor exercises, and generally takes more time and patience than mild urinary incontinence. Pelvic floor exercise must be done daily, usually 200-400 kegels per day. It will take time for your client to build up to this number, so start with 30 to 50 daily and increase by 20 to 50 per week. Just like any other muscles in the body, pelvic floor muscles will tire easily until tone is developed.

Women who experience uterine prolapse may first suspect something is wrong because they feel a lot of pressure or bulging in their vagina, or a sensation of having a tampon in when they aren't wearing one. There are varying degrees of prolapse, from a mild first degree where the cervix and uterus has slipped down slightly to a fourth degree where the cervix protrudes from the vagina. Prolaspe is not a medical emergency, but it can be uncomfortable, debilitating, particularly from the anxiety or threat that 'everything will fall out." Physical activities such as heavy lifting, jumping, or any effort that puts strain on the uterine ligaments must be avoided.

Surgical repair of the prolapse is the recommended medical treatment. The procedure involves tacking the uterus and bladder back up in the pelvic cavity. In extreme or persistent cases, hysterectomy is recommended. This is rarely, if ever necessary, in women of childbearing age, and a uterine prolapse does not preclude giving birth vaginally to more children. Furthermore, with diligence, persistence, and proper pelvic floor exercises combined with pelvic tilts, pelvic organ prolapses can be healed naturally.

Classic Chinese Herbal Formula for Uterine Prolapse

Herbs alone cannot treat a uterine prolapse. Treating a uterine prolapse requires plenty of time – as much as 1 to 2 years – of diligently repeating pelvic floor exercises daily, good nutrition, and avoiding fatigue and lifting heavy objects. However, the following formula is considered the classic herbal preparation for treating prolaspe. It is taken daily as a tea or in the form of dried herbal powder capsules. See Resources for Chinese Herbs.

Tonify the Middle and Augment the Qi (bu zhong yi qi tang)

Astragalus	12 g
Ginseng (or 18 g Codonopsis)	9 g
Atractylodis	9 g
Honey-fried licorice	3 g
Tang gui	6 g
Citrus peel	6 g
Cimicifuga	3 g
Bupleurum	3 g

Hemorrhoids

Hemorrhoids can best be prevented with attention to diet and preventing constipation. A high fiber diet with plenty of fresh fruits and vegetables and adequate intake of water is ideal for this. Straining during bowel movements, as well as straining to push at birth further aggravates hemorrhoids. The following preparations can be used while breastfeeding.

Internal tincture therapy for treating hemorrhoids

Urtica dioica (tincture)	40 mL
Rumex crispus (tincture)	30 mL
Aesculus hippocastanum (tincture)	20 mL
Collinsonia canadensis (tincture)	10 mL
Total	100 mL

Dose: 1 teaspoon twice daily for 6 weeks

Topical therapy for treating hemorrhoids

Combine these tinctures:

Hamamelis virgaurea	7 mL
Lavandula officinalis	7 mL
Plantago spp.	7 mL
Quercus alba	7 mL
Total	28 mL

Directions: Dilute 1 tsp of tincture in 1 tbs water. Dab liquid on to affected area with a cotton ball several times daily. Alternatively, soak a cosmetic pad in the dilute solution and apply to the hemorrhoid, leaving in place tucked against the hemorrhoid. Repeat several times daily. Continue treatment for 2 weeks or until hemorrhoid is resolved.

Case History: Postpartum Depression (Continued from Lesson 37)

Anne began her prenatal care with a midwife, 9 weeks pregnant with her second child. At age 39 she had postponed this second pregnancy for 6 years largely out of fear of re-experiencing the postpartum depression that had debilitated her after the birth of her first child. Her first pregnancy had been uneventful, though she recalled losing a large amount of blood at birth. In the weeks and months postpartum she reported symptoms of depression to her midwife, but these were dismissed as normal for the adjustment to motherhood. She tried St. John's wort with no noticeable improvement. At one year postpartum the symptoms became severe, with suicidal thoughts. She had gained a significant amount of weight over her prenatal and pregnancy weights which added to her depression, and she was experiencing serious marital discord, so she sought the help of a psychiatrist. Anne spent over a year trying different prescription medications singly and in combinations. Finally, with a combination of three antidepressant drugs and a synthetic form of T3 hormone, she was symptom-free and remained so for several years. With the help of a prenatal psychiatry specialist she was able to eventually wean off most of the drugs, which she did so she could become pregnant. She remained on a single antidepressant medication for the first couple of weeks of pregnancy and then discontinued this as well. She did not like the idea of being on pharmaceuticals at all, as this did not fit with her "natural philosophies" about medicine, and felt entirely uncomfortable using the drugs during pregnancy.

Upon beginning her relationship with a new midwife for this pregnancy, she had a tremendous amount of anxiety about the potential for repeated PPD. Her midwife worked with her to develop a plan that included postnatal support, about which her husband was educated during the course of the pregnancy, nutritional supplementation with an emphasis on essential fatty acid intake, a plan to begin using appropriate herbs immediately postpartum, and a back-up plan to access medical care if needed. She talked a great deal with her midwife about feelings of abandonment after her first pregnancy, and anger that her practitioner had not recognized the PPD. Her new midwife agreed to be available by pager for an extended postnatal period of time so that Anne would have the assurance that she was not going to feel isolated or alone, and that she could reach her midwife should she feel panicked. This was very reassuring to her throughout the pregnancy.

Anne's diet was revised to include fewer simple carbohydrates (she ate a good deal of refined and natural sugar) and more whole grains and ample protein. She was encouraged to get in the habit of eating often to prevent hypoglycemia. Her pregnancy was mostly uneventful with the exception of occasional migraines and severe itching which were treated botanically. She gave birth to a healthy baby, but again had a significant blood loss after the birth and was instructed in boosting her iron nutritionally and with Floradix Iron and Herbs for 6 weeks postnatally. Her midwife was in frequent contact with her, specifically inquiring about social and emotional aspects of her adjustment. Her husband was much more supportive. She took 3 g of a combination of DHA and EPA in the form of fish oil, and also 1500 mg of evening primrose oil daily. Immediately postpartum she also began taking the following tincture:

Motherwort (*Leonorus cardiaca*)	25 mL
Eleuthero (*Eleutherococcus senticosus*)	25 mL
Blue vervain (*Verbena officinalis*)	20 mL
Passion flower (*Passiflora incarnata*)	20 mL
Lavender (*Lavendula officinalis*)	10 mL
Total	100 mL

Dose: 5 mL twice times daily.

Anne remained on this protocol for 6 months postnatally and had no depression. She went off the formula at this point, but kept a 200 mL bottle on hand "for emergencies." She resumed taking the formula at 8 months postpartum due to feeling "overwhelmed," and remained on it for several more months, after which time she discontinued the formula and remained symptom free. She used no pharmaceutical drugs at any time in the postpartum period with her second child.

HERBAL MEDICINE FOR WOMEN

Unit 3 Lesson 42

Materia Medica for Women 3

Learning Objectives

The materia medica section of each unit provides an overview of a selection of the herbs relevant to understanding the botanical treatment of conditions found in that unit and throughout the course. This is in no way an exhaustive materia medica of the herbs with which you will want to become familiar or need to know for completion of the course; it is simply a sampling. The questions in this lesson may be drawn from any of the lessons in this unit.

Unit 3 Lesson 42 Materia Medica for Women 3

As you study the herbs it is important to attempt to learn the following:

- Official common and botanical names
- Plant part(s) used
- Actions
- Indications
- Preparation and Dose
- Other herbs with which the herb you are studying are commonly combined
- Major safety information
- Use during pregnancy and lactation

Individual herbs often have many applications, thus you will find a tremendous amount of crossover between the herbs presented in each Unit. As you progress through the course you will necessarily refer back to previous lessons and materia medica to answer questions and review applications, and you will use the indices in the required accompanying textbooks for additional information. You might also find that some discussions in the materia medica appear before that topic is covered extensively in the course, for example, the materia medica in this lesson prepares you for some of the cases you will encounter in *Unit 4: Herbs for the Wisdom Years*, and also revisits some of the botanicals mentioned in previous Units.

California poppy

Damiana

Eleuthero

Ginkgo

Hawthorn

Horse chestnut

Kava kava

Red Clover

Sage

St John's wort

California Poppy

Botanical name: *Eschscholzia californica*

Plant part(s) used: aerial parts

Actions

- Anxiolytic
- Sedative
- Analgesic

Historical Use

- Sedative/ soporific
- Analgesic

California poppy was used in Native American and native Hispanic medicine as a sedative and analgesic, as a sleep aid and for toothache. Parke-Davis included California poppy extract in its 1890 pharmaceutical catalog as a sleep inducing agent and an analgesic, which was considered "above all harmless." Medical practitioners of the time used it for this purpose.

Modern Clinical Indications

- Anxiety, Stress
- Chronic pelvic pain
- Dysmenorrhea
- Migraine
- Pain relief (non-addictive)
- Sleep promotion (non-addictive)
- Depression

California poppy is used as a sedative, anxiolytic, and analgesic for the relief of pain, anxiety, stress, insomnia, pain in labor, neuropathy (i.e. sciatica), and related conditions.

Extracts of California poppy have been shown, experimentally, to interact with both opioid and GABA receptors, possibly explaining its sedating actions. Other possible mechanisms of action include effects on enzymatic degradation of catecholamines enhanced GABA binding at synaptic membranes in the brain, and dose-dependent binding to benzodiazapene receptors. The isoquinoline alkaloids in the herb are reported to have analgesic activity. Specifically, a California poppy and Corydalis extract combination (80% and 20% respectively) showed interaction with opiate receptors. Clinical trials have demonstrated changes in EEG measurements with a single dose of a combination extract of these two herbs, and normalization of disturbed sleep without carry-over effects in two clinical trials.

Preparation and Dose

Tincture: 2-4mL/ 2-3x/day

Commonly combined with

- Analgesics
- Antispasmodics
- Anxiolytics/antidepressants
- Nervines
- Sedatives

Major Safety Information

There are no major safety concerns associated with this herb, however, it is generally recommended that care be taken when driving or operating machinery when using sedating agents.

Use During Pregnancy and Lactation

There is no data on the safety of California poppy during pregnancy and lactation. BSH gives it a 2B rating, citing only a statement by Michael Moore that it is contraindicated in pregnancy. While certainly not for regular use due to its CNS effects, acute, short-term (1-2 doses for not more than a few consecutive days) use would not seem to be problematic in pregnancy or lactation, particularly if avoided during the first trimester.

Damiana

Botanical name: *Turnera diffusa*

Plant part(s) used: leaf, stem

Actions

- Antidepressant
- Aphrodisiac
- Thymoleptic
- Aperient

Historical Use

- Aphrodisiac
- Sexual weakness and debility with a component of depression
- Urinary tonic; urinary complaints
- Antitussive
- Mild purgative (bowel)

Modern Clinical Indications

- Aphrodisiac
- Sexual disorders with an anxiety component
- Anxiety, depression
- Atonic constipation
- Irritable bowel
- Irritable bladder

Damiana is predominantly popular as an aphrodisiac, commonly used by women, but for men as well. Herbalists also recognize its value in treating neurodysthonic and irritable bladder conditions (often combining it with kava kava). Limited evidence suggests a possible hypoglycemic effect.

King's American Dispensatory (1898)

Harvey Wickes Felter, M.D

John Uri Lloyd, Phr. M., Ph. D.

COMMON NAME: Damiana.

Botanical Source, History, and Description. – This drug was introduced, in 1874, by Dr. F. O. St. Clair, and first appeared in the form of fluid extract, from the firm of Messrs. Helmick & Co., of Washington, D. C. Three distinct varieties or species of plants under the name of Damiana, are occasionally found upon the market, and are derived from as many different sources. In connection with the history of this drug, it may be stated that Mr. H. S. Wellcome read a paper upon the subject before the New York Alumni Association of the Philadelphia College of Pharmacy, October 15, 1875, at the same time exhibiting cuts of leaves, which were known upon the market, at that time, as "Damiana," reproduced by us (Fig. 92).

Action, Medical Uses, and Dosage. – This drug has been almost eulogized for its positive aphrodisiac effects, acting energetically upon the genito-urinary organs of both sexes, removing impotence in the one, and frigidity in the other, whether due to abuses or age. Many physicians who have tried it, deny its possession of such virtues, but the friends of the drug attribute their failures to the use of the spurious articles. It will very likely be found to possess laxative, tonic, and diuretic properties only; and the aphrodisiac effects following its use, no more prove that these belong to it, than the same effects, that not unfrequently appear after the employment of many other agents prove that such agents possess similar excitant virtues. Upon the system at large, it exerts a tonic influence, and is useful in some cases of chronic cystic and renal catarrh. It relieves irritation of the urinary mucous membranes, improves digestion, and overcomes constipation in some instances. In respiratory disorders, it may be employed to relieve irritation and cough, and, by its tonic properties, to cheek hypersecretion from the broncho-pulmonic membranes. The dose of the fluid extract is from 1/2 fluid drachm to 1/2 fluid ounce; specific damiana, 5 to 60 drops.

Specific Indications and Uses. – To relieve irritation of the genito-urinary mucous surfaces. (Sexual weakness and debility, with nervousness and depression.

Fun Fact: On the bookshelf next to my desk sits a glass bottle filled with yellow liquor. The bottle is in the shape of a voluptuous woman – think a sexy version of the Venus of Willendorf – and the yellow liquor is nothing less than Damiana liquor, picked up for me by an herbal friend who visited Mexico!

Preparation and Dose

Dried plant preparations: 2-4 g in infusion, 3x daily

Tincture: 2-4 mL

Commonly combined with

- Other aphrodisiacs
- Anxiolytics
- Antidepressants
- Adaptogens

Major Safety Information

There is a lack of rigorous studies on the uses and benefits of this herb, as well as a lack of safety data. One case report can be found of an individual that developed tetanus-like paroxysms and convulsions after ingesting 200g of damiana extract — this was attributed to cyanide poisoning. No other case reports or side-effects have been identified, Damiana contains arbutin, the same active constituent that can be found in uva ursi, but at a much lower amount (0.7% versus 5-18% respectively). The low quantity of arbutin in damiana is not expected to cause the toxic effects that are associated with large amounts of arbutin ingestion.

Use During Pregnancy and Lactation

No information was found on the safety of damiana during pregnancy and lactation; based on its effects on the reproductive system, use during pregnancy, particularly the first trimester, is not recommended.

Eleuthero

Botanical name: *Eleutherococcus senticosus*

Plant part(s) used: root

Actions

- Adaptogen
- Immunomodulator

Historical Use

Eleuthero, a native of northeast Asia, is used in TCM for general weakness and debility, lassitude, anorexia, aching of the groin and knees, insomnia, and dream-disturbed sleep.

Modern Clinical Indications

- Fatigue, debility, chronic illness
- Chronic inflammatory conditions
- HPA axis dysregulation
- Stress, exhaustion
- Insomia
- Mild depression
- Convalescence
- Immunotonic (general)
- To enhance stamina and mental performance

The use of eleuthero as an adaptogen originated in the former Soviet Union in the latter half of the 20th century when it was researched and promoted by scientists as a substitute for Panax ginseng, which was more expensive and less accessible. Pharmacological studies have suggested that its effects are at least equal to, and perhaps superior to those of Panax ginseng. Until recently referred to as Siberian ginseng, the herb is now properly referred to as Eleuthero, due to recognition that while the plants are from the same family, their actions arise from very different chemical constituents.

Eleuthro's actions are much like ginseng, are considered immunomodulating, stress reducing, performance and energy enhancing, anabolic, and adaptogenic, hence the original misnomer. The herb has demonstrated the ability to improve adrenal function, stress tolerance, enhance immune function and resistance to infection including influenza, and enhance selective memory.

Animal experiments have confirmed not only these actions, but also the recovery of the reduction of NK activity and the inhibition of corticosterone elevation induced by swimming stress in animal models. Stress-induced gastric ulcers have been prevented in animal models, and positive results have been shown with reduction of serum lipid-peroxide levels and improved lipid metabolism. In healthy volunteers, ingestion of fluid extracts led to markedly increased T-lymphocyte counts and studies have demonstrated overall improvements in cellular defense. Studies on athletic performance and stress response have shown that Eleuthero improves the testosterone to cortisol ratio by over 28%, a marker of reduced stress response in athletes. Clinical findings have also suggested that patients with moderate fatigue in chronic fatigue syndrome may benefit from use of Eleuthero, and that the elderly may safely experience improvement in some aspects of mental health and social functioning after 4 weeks of therapy, although these differences attenuate with continued use. Eleuthero has also been shown to cause reductions in cardiovascular stress response in healthy patients.

Preparation and Dose

Dried plant preparations: 0.6-3 g daily for up to 1 month or repeated as long as necessary with 2 week breaks between 6 weeks duration of use. Continuous use is also sometimes recommended for specific conditions.

Tincture: 0.5-6 mL 1-3 x daily as above

Commonly combined with

- Adaptogens
- Tonics
- Nervines
- Immunotonics

Major Safety Information

Eleuthero is considered to have a high safety profile. Russian studies have noted a general absence of side effects and adverse reactions, and there are no expected significant herb-drug interactions, however, its use is not recommended for patients with hypertension or during acute phase of infection. The German Commission E considers it an invigorating tonic to be used in cases of fatigue, decreased work capacity and concentration, and for convalescence. It is not heating or stimulating to the degree of ginseng or Schisandra. In fact, herbalists consider it a generally neutral herb that can be used by anyone. Eleuthero is sometimes contraindicated for hypertension, however, it is also sometimes used to treat hypertension. Insomnia, palpations, tachycardia, and hypertension have been reported as side-effects. Russian recommendations have suggested the herb not be used premenopausally, by schizophrenics or those with highly energetic, nervous, or tense personalities, or those taking antipsychotic or stimulant medications or receiving hormonal therapies.

Use During Pregnancy and Lactation

No teratogenicity has been demonstrated in various animal species and no side-effects are expected, however, no studies have been conducted on safety of use during pregnancy and lactation. There are no adverse effects expected from use during lactation.

Ginkgo

Botanical name: Ginkgo biloba

Plant part(s) used: leaf

Actions

- Antioxidant
- Anti-platelet activating factor (anti-PAF)
- Circulatory stimulant
- Cognition enhancing
- Neuroprotective

Historical Use

The fruit of ginkgo is used traditionally in TCM; medicinal use of the leaf is a relatively modern phenomenon.

Modern Clinical Indications

- Mild dementia
- Cerebrovascular insufficiency/ cognitive deficiency
- Vascular insufficiency; Intermittent claudication
- PMS symptoms
- Antidepressant related sexual dysfunction
- Depression, including insomnia related to depression

Standardized ginkgo extracts have been studied extensively in Europe over the past 3 decades primarily for the treatment of cerebrovascular insufficiency, dementia, and peripheral vascular disease. Both the WHO and the German Commission E recognize ginkgo as a treatment for organic brain dysfunction with symptoms including memory deficits, forgetfulness, concentration difficulties, depressive emotional states, mood swings, anxiety, restlessness, dizziness, tinnitus, hearing loss, disorientation, and headache. Ginkgo has been shown to be beneficial in treatment resistant depression in elders, improvement of sleep in major depression, and improvement of cognitive function in patients with depression, dementia, and post-stroke. The primary effects of the extract are likely due to neurotransmitter regulation, neuroprotective effects, and improvement in cerebral and peripheral vascular circulation. The literature on ginkgo is too extensive to present within the cope of these plant profiles; students are encouraged to see the American Herbal Pharmacopoeia and Therapeutic Compendium monograph *Ginkgo Leaf and Ginkgo Leaf Dry Extract* for a comprehensive review of the evidence of this herb.

Gynecologic Uses of Ginkgo

- A double-blind placebo-controlled trial of 165 women ages 18-45 years old with a confirmed PMS diagnosis given placebo or 80 mg of ginkgo standardized extract (to 24% ginkgo flavones and 6% terpenes) twice daily from Day 16 of the menstrual cycle through Day 5 of the following cycle, for 2 consecutive menstrual cycles. Of 143 patients evaluated at the end of the trial, there was a statistically significant reduction in breast pain, tenderness, and fluid reduction in the ginkgo group versus placebo.
- Preliminary in vitro and clinical evidence suggests that ginkgo may have contributed to a reduction in the risk of developing ovarian cancer, the fourth leading cause of cancer death in women and the second most commonly diagnosed gynecologic cancer. According to data from a population-based survey of over 600 women, conducted by researchers at Harvard Brigham and Women's Hospital, women who took ginkgo supplements had a 60 percent lower risk of ovarian cancer. In the laboratory the same researchers exposed ovarian cancer cells to a low dose of ginkgolide for 72 hours. This led to up to an 80 percent reduction in the growth of the ovarian cancer cells.

Preparation and Dose

Leaf 120-240 mg extract/day in 2-3 divided doses or tincture equivalent

Commonly combined with

- Memory aids
- Antioxidant herbs
- Circulatory tonics
- Antidepressants
- Nervines/ neuro-trophorestoratives

Major Safety Information

Overall, ginkgo extracts are well-tolerated with minimal side-effects when used at recommended doses and within appropriate guidelines. While a total of nearly 600 adverse events reports have been made to the WHO to international database of adverse effects, based on single-ingredient ginkgo products, this is a relatively small number given the millions of annually ingested doses of ginkgo products. Also, not all of the reports have been analyzed; thus a causal relationship has not been established in all cases. Most adverse events are of minor GI disturbances. Contact dermatitis may occur when harvesting the leaves or pressing a tincture by hand, thus gloves should be worn and care should be taken not to touch the eyes when handling the plant.

Perhaps the greatest concern associated with ginkgo use has been reports of increased bleeding and possible interactions with anticoagulant medications. A total of 58 reactions associated with bleeding, platelets, and clotting disorders have been received by the WHO database. Specific events have included GI hemorrhage

from gastric ulcer, epistaxis, hemoptysis, post-operative hemorrhage, cerebral vascular accident, and ocular or retinal hemorrhage. In most cases, other risk factors for bleeding were present. While causality has not been definitely established, it is nonetheless prudent to discontinue ginkgo use at least two weeks prior to surgery and to avoid concomitant use with anticoagulant medication and in patients with bleeding disorders or medical problems associated with a bleeding risk, for example, gastric ulcers. Again, see the American Herbal Pharmacopoeia and Therapeutic Compendium monograph Ginkgo Leaf and Ginkgo Leaf Dry Extract for a comprehensive review of the evidence of this herb.

Possible Herb-Drug Interactions

- Two studies reported a mitigation of sexual dysfunction caused by SSRIs. This could be considered a positive side-effect. Discontinuation of treatment with ginkgo resulted in a reversal of the improvement.
- One report suggested potentiation of the sedative effects of trazodone in an 80-year-old Alzheimer's patient taking 20 mg of trazodone twice daily and 80 mg ginkgo extract twice daily for 3 days who subsequently became comatose. He was revived with no consequences. This is a single case report and the association is speculative.
- Two studies noted a "remarkable improvement" in patients taking ginkgo extract (EGb 761) used in conjunction with the cytostatic agent 5-fluorouracil (5-FU) for the treatment of pancreatic or colorectal cancer.
- Pretreatment of the animals with ginkgo extract (96 mg/kg daily for 8 days) potentiated the effects of diazepam.
- Possible changes in the pharmacokinetics of nifedipine and omeprazole when ginkgo is concurrently taken have been noted.
- One study reported that ginkgo extract (EGb 761) at a dose of 120 mg daily for 3-months may increase the metabolization of oral hypoglycemic agents. Ginkgo should be used cautiously by diabetics, and under the supervision of a qualified health care professional.

Use During Pregnancy and Lactation

Embryotoxicity studies on male and female rats treated with ginkgo extracts at varying doses prior to conception with evaluation of fetuses showed no adverse effects in reproductive performance or fetal development. Further embryotoxicity studies on female rats and rabbits and follow-up evaluation of half of the fetuses and the remaining offspring which were allowed to grow to maturity and mate with each other showed no adverse effects. No mutagenicity has been demonstrated in Ames testing. Nonetheless, this herb has not been evaluated for safety during pregnancy and lactation, and due to its pharmacologic effects, is likely best avoided during these times.

Hawthorn

Botanical name: *Crataegus oxyacantha, C. laevigata, C. monogyna*

Plant part(s) used: fruit, leaf, and flower

Actions

- Cardiotonic
- Antihypertensive
- Peripheral vasodilator

Historical Use

The Eclectic Materia Medica, Pharmacology and Therapeutics (1922)

Harvey Wickes Felter, M.D.

Specific Indications. – Tentatively the indications for crataegus may be stated thus: Cardiac weakness, with valvular murmurs, sighing respiration, or other difficult breathing, especially when associated with nerve depression or neurasthenia; mitral regurgitation, with valvular insufficiency; cardiac pain; praecordial oppression; dyspnea; rapid and feeble heart action; marked anemia, associated with heart irregularity; cardiac hypertrophy; and heart-strain, due to over-exertion or accompanying nervous explosions.

Action and Therapy. – The bark, fruit and leaves of several species of the genus Crataegus have in the past been used as astringents and tonics….it is distinctive in occupying almost wholly a position in cardiac therapy, though recognized to some extent as a general tonic. Investigators are divided as to its activity, some claiming it only as a functional remedy, while others go so far as to claim it curative of many heart irregularities, even in the presence of an actual organic disease of that organ. Among the conditions in which crataegus is accredited with good work are angina pectoris, endocarditis, myocarditis, and pericarditis, valvular incompetency with or without enlargement of the rings, rheumatism of the heart, dropsy depending on heart disorders, neuralgia of the heart, tachycardia, and in atheromatous conditions of the vessels. The exact indications are as yet none too well determined, enthusiastic admirers of the drug having unwittingly overestimated its power. There is no doubt, however, of its value in many of the conditions mentioned, especially the functional types; and there can be no question as to its value as a tonic to the heart-muscle. It is not poisonous, has no cumulative effect, and apparently from reports of a large number now using it, may be useful to control many of the symptomatic results depending upon a badly functionating or tired heart. Crataegus has been suggested to rest that organ and thereby guard against arteriosclerosis. It is a new remedy still on trial; and as yet with no rational explanation of its reputed powers. The smaller doses are suggested as more likely to succeed than full doses.

Modern Clinical Indications

- Cardiac insufficiency
- Heart palpitations with anxiety; general nervousness
- Hypertension
- Tachycardia
- CHF
- Asthma

Hawthorn, widely accepted in Europe as a treatment for mild congestive heart failure and minor arrhythmias, is one of the most important herbs in the materia medica for the prevention and treatment of cardiovascular disease. Some consider it so beneficial that is has been called a "food for the heart" and suggested that everyone over 50 should take hawthorn daily! Much like red wine and green tea, hawthorn is rich in flavonoids (with the glycosides catechin and epicatechin) and oligomeric proanthocyanidins (OPCs), though amines and triterpene saponins are found as well. It is thought to possess cardiotonic, coronary vasodilatory and hypotensive actions.

The pharmacological actions of leaf with flowers include increase in cardiac contractility, increase in coronary blood flow and myocardial circulation, protection from ischemic damage and decrease of peripheral vascular resistance. Presently, hawthorn is used as a cardiac tonic for mild heart disorders including CAD and angina, arrhythmias, hypertension, myocardial weakness, and prevention of arterial degeneration, well supported by scientific literature. Current research supports the use of *Crataegus* extracts for the treatment of CAD and angina, ischemia-induced arrhythmias, dyslipidemias, hypertension and early stage congestive heart failure. Modes of action suggested by animal and in vitro studies include positive inotropic activity (increased cAMP, similar to cardiac glycosides), reducing peripheral vascular resistance and increased coronary and peripheral blood flow, increased integrity of vessel walls, decreased oxygen demand by the myocardium, protection against myocardial damage through antioxidative properties, protection against arrhythmias (through lengthening the refractory period), and anti-inflammatory effects.

There is also some evidence through animal studies that hawthorn may lower serum lipid levels and improve hypertension, perhaps through the release of the potent vasodilator nitric oxide. Inhibition of platelet aggregation has been an additional observed effect of hawthorn in vitro. Although most of the science we have on hawthorn is from animal and in vitro studies, there have been extensive human trials investigating the use of hawthorn in early congestive heart failure. Preliminary studies by German pharmaceutical company Schwabe using an extract of hawthorn leaves and flowers (WS® 1442) indicated the product was safe and effective to treat CHF in humans. Standardized to contain 18.75% oligomeric procyanidins, this product was found to increase exercise tolerance and decrease symptoms of CHF. Zapfe, in a recent randomized, double-blinded, placebo-controlled study using WS® 1442 on 40 patients (75% women) with New York Heart Association (NYHA) class II mild, chronic CHF, confirmed a 10% improvement in exercise tolerance compared with a 15% reduction in the placebo group.

Hawthorn has some mild CNS depressant activity and is used in the treatment of anxiety, combined with other appropriate herbs.

Gynecologic Uses of Hawthorn

Hawthorn may be considered the premiere cardiotonic, cardioprotective herb for women as we age and transition through menopause, helping to offset the increased risk of heart disease that occurs with age. Its gentle anxiolytic properties also make it a wonderful herb for use in PMS, menopausal anxiety, and postpartum irritability and tension when combined with appropriate nervine herbs, for example, motherwort.

Preparation and Dose

Dried plant preparations: 0.3-1 g 3x/day

Tincture: 1-2 mL 3x/day

Paste or concentrate: as recommended per product

Commonly combined with

- Cardiotonics
- Antihypertensives
- Anxiolytics
- Nervines and Sedatives

Major Safety Information

Hawthorn is exceptionally well tolerated and safe as recommended. It is considered a safe and nutritive herb with supportive action on cardiac function and support of cardiac cells. Rare reported side effects include nausea, headache, dizziness, and palpitations. Theoretical concerns over potentiation of the actions of other cardiovascular medications have not been borne out clinically, including in a trial comparing digoxin alone compared with digoxin plus hawthorn. Potentiation of inotropic effects without toxicity was observed in guinea pig hearts. Use of the herb concurrently with cardiac glycosides has been suggested as a means to lower cardiac glycoside dose and toxicity. Theoretical potentiation of effect on medications with coronary dilatory effects is based on animal studies. Neither ESCOP nor the German Commission E list herb-drug interactions as a risk associated with the use of hawthorn, and specifically do not list interactions with cardiac glycosides.

There have been no reported adverse reactions to the use of berries, however there have been reports of nausea and gastrointestinal discomfort, as well as palpitations, headache, dizziness, sleeplessness, agitation and some circulatory disturbances when preparations containing the leaves and flowers have been taken, even in recommended therapeutic doses.

It is generally inadvisable to combine cardiac herbs with cardiac medication unless under the specific guidance of an experience health care provider.

Use During Pregnancy and Lactation

Unspecified hawthorn extracts have demonstrated reduction in uterine tissue tone and motility in vitro. The clinical significance of this is unknown in pregnancy. There are no expected adverse effects from occasional use of hawthorn tea during either pregnancy or lactation.

Horse Chestnut

Botanical name: *Aesculus hippocastanum*

Plant part(s) used: seed extract

Actions

- Venotonic
- Anti-inflammatory
- Antiecchymotic

Historical Use

Traditionally horse chestnut has been used, primarily in Europe, for the following conditions:

- Varicosities
- Phlebitis
- Diarrhea
- Fever
- Prostate enlargement

Modern Clinical Indications

- Chronic venous insufficiency
- Varicosities, hemorrhoids

Horse chestnut has been shown to be effective for treating chronic venous insufficiency, a condition wherein the veins of the lower extremities are not effective at pumping blood back to the heart, resulting in blood collecting in the lower limbs and lower extremity edema. In total, 13 clinical trials have shown that patients who used horse chestnut had a significant decrease in lower extremity edema and symptoms associated with chronic venous insufficiency including leg pain, itching, tension, and fatigue. These trials generally used horse chestnut preparations for a total of 12 weeks. Aescin, a component in horse chestnut, may reduce inflammation and increase venous tone. It may also have some general venoprotective actions. Additional constituents in horse chestnut improve the general integrity and tone of the blood vessels and decrease their permeability. A compound called aesculetin may act as an anticoagulant and blood thinner, and is therefore often excluded from over-the-counter horse chestnut products.

Anti-inflammatory actions have been documented for the saponins (aescin), which decreases transcapillary filtration of water and protein and increases venous tone by increasing the vasoconstrictor, prostaglandin F2 alpha. It stabilizes cholesterol-containing membranes of lysosomes and limits the release of enzymes, further protecting the blood vessels from potential damage. The triterpene glycosides and steroid saponins lend to a decrease venous capillary permeability and appear to have a tonic effect on the circulatory system. While there is no clinical evidence supporting the use of horse chestnut for varicosities or phlebitis, these are common uses amongst herbalists. The German Commission E approves the use of horse chestnut for treating venous insufficiency of the legs.

Preparation and Dose

Dried plant preparations: 0.2-1g 3x/day

Extract (standardized): Equivalent to 50-150mg aescin in divided daily doses

Clinical trials support horse chestnut use for up to 12 weeks; no clinical trials have tested the long-term use of this herb. Herbalists commonly use the herb for an extended period of time as a venotonic.

Commonly combined with

- Venotonics
- Cardiovascular/Circulatory tonics
- Diuretics (if edema is significant)

Major Safety Information

The safety of horse chestnut has not been extensively evaluated. Side-effects may include GI upset, nausea, and vomiting most likely due to the high saponin content of the herb. Symptoms of toxicity have included diarrhea, urticaria, uremia, muscle twitching, dilated pupils, depression, and paralysis based on limited case reports. Two reports of toxic nephropathy have appeared in the literature. No causal relationship has been established between these effects and horse chestnut consumption. These adverse effects have been seen in postsurgical patients who were given the herb either intravenously or intramuscularly. These effects are not expected with normal oral doses. The BSH gives the herb a 1A rating for safety. An additive effect with anticoagulants has been mentioned in the literature, however, this herb does not possess coumarins with the minimum structural requirement for anticoagulant activity. The BSH does not give the herb any drug interaction contraindications.

Use During Pregnancy and Lactation

Only minimal investigation of the herb during pregnancy has been conducted (German language studies). The BSH gives this herb a 1A rating; care should be taken when using this herb in pregnancy. No adverse effects are expected during lactation.

Kava Kava

Botanical name: *Piper methysticum*

Plant part(s) used: peeled dry rhizome

Actions

- Anxiolytic
- Sedative
- Analgesic
- Antispasmodic
- Anticonvulsant

Historical Use

Deeply rooted in the ceremonial and daily recreational traditions of South Pacific Islanders, from where it spread to neighboring islands and even to as far as Australia via missionaries, kava kava is used from everything from ceremony and spirituality, in politics to ease and facilitate negotiations and "criminal" disputes, to a daily recreational beverage. It was traditionally taken as a cold infusion, made from root grated, powdered, macerated or chewed rhizome and placed inside the kava bowl to which cold water is then added. This mash is steeped and strained repeatedly, then poured into cups for drinking. It could be considered the beverage of hospitality in the South Pacific.

Traditional indications include use as an intoxicant, as a nervine and neuromuscular restorative, its actions for example calming the nerves, inducing relaxation and sleep, relieving headache, counteracting fatigue or weakness, and restoring muscle strength, and for rheumatism. It was used as a diaphoretic in the treatment of chills and head colds, and for asthma. Another important medicinal use was as a diuretic particularly for difficulty urinating and for the treatment of chronic cystitis, syphilis, and gonorrhea.

Kava was recognized by the Eclectics in the late 19th century as a local anesthetic, central nervous system depressant, and cardiac stimulant, and as a treatment for gonorrhea. In the early 20th century the Eclectics cited its use for neuralgic conditions of the eyes, ears, and teeth, for edema, and for gastric atony and post surgical anorexia. The herb was listed in the 20th-24th editions of The United States Dispensatory of the United States of America (1918-1947) and the fluid extract had official status in the 4th and 5th editions of the National Formulary (1888-1926).

Unit 3 Lesson 42 Materia Medica for Women 3

Modern Clinical Indications

- As a sedative and short-term mood elevator for anxiety and associated sleep disorders
- Neurovegetative complaints associated with perimenopause and menopause
- As an analgesic, antispasmodic, and neurotonic for dysuria, neurogenic bladder pain, and genital/pelvic pain
- As an antispasmodic and nerve tonic for hyperactive bladder
- Rarely, used for topical analgesia in postpartum perineal repair and healing of episiotomy/lacerations

Herbal practitioners regard kava kava as a highly reliable anxiolytic, antispasmodic, analgesic, and neuroprotective herb, with mild topical anesthetic action. Treatment of anxiety and anxiety disorders is the most common clinical indication for kava kava, however it is also widely used for the treatment of neuromuscular tension, neuralgia, neurovegetative complaints associated with perimenopause and menopause, dysuria, urogenital pain, and hyperactive bladder.

Preparation and Dose

Tablets, capsules of dried rhizome: 1.5-3 g daily, equivalent to 60-120 mg kavalactones daily

Liquid extract: 3-6 mL daily

Standardized preparations: 60-200 mg kavalactones daily. 60 mg kavalactones 2-4 times/day

Standardized product should be used to control the amount of kavalactones consumed, both for efficacy and safety purposes. Duration of use should not exceed 3 months.

Commonly combined with

- Nervines
- Anxiolytics
- Sedatives
- Analgesics
- Antidepressants

Major Safety Information

Common side-effects include:

- stomach complaints
- restlessness
- drowsiness
- tremor
- headache and tiredness

- A 1997 peer-reviewed appraisal of kava kava safety based on a comprehensive review of the scientific and historical ethnobotanical literature determined that "when used in normal therapeutic doses, kava appears to offer safe and effective anti-anxiety and muscle relaxant actions without depressing centers of higher thought. The safe use of kava as a dietary supplement in cultures that do not have historical experiences with its use depends on responsible manufacturing, marketing, individual consumption patterns, and education."
- 79 adverse event reports of hepatotoxicity reportedly associated with oral use of kava kava preparations have been reported worldwide, with most in Europe, but also in Canada and the US, and have led to rigorous investigation of the safety of this herb. While in most cases prescription pharmaceutical medications were being taken in conjunction with kava kava, there was regular alcohol intake, or prior hepatic disease existed, several cases of severe hepatic damage, including fulminant hepatic failure, apparently occurred de novo. These cases subsequently led to the withdrawal or restriction of sales of kava kava products from many national commercial markets, particularly in Europe. In the Cochrane systematic review discussed above, six of twelve trials reported adverse events experienced by patients receiving kava extract. Stomach complaints, restlessness, drowsiness, tremor, headache and tiredness were reported most frequently.
- Four trials comprising 30% of patients in the reviewed trials report the absence of adverse events while taking kava extract. None of the trials reported any hepatotoxic events. Seven of the reviewed trials measured liver enzyme levels as safety parameters and report no clinically significant changes. Warnings about kava and performance-safety are common. It has been proposed that piper methsticine may cause cytotoxic cell death by interfering with hepatocellular mitochondrial function.
- Several cases of individuals being cited for "driving under the influence" after having used kava kava have been reported, and it is generally recommended that individuals not drive or operate machinery or equipment while using this herb.
- Generally well-tolerated in clinical trials with few reported herb-drug interaction. Potential interaction with benzodiazepines, serotinergic and dopaminergic acting medication, and medications that act on sodium ion channels have been proposed. Should not be used with SSRIs, TCAs, barbiturates, benzodiazepines, or antipsychotic medications.
- Kava kava may potentiate the effects of alcohol, thus they should not be taken simultaneously beyond the normal amount present in kava kava extracts.

- Kava dermopathy and ichthyosiform condition, is a well know side effect of frequent, high dose kava kava consumption. In fact, in Oceania, this yellowish, scaly skin condition is common amongst kava kava users, and is reversible upon discontinuation of kava kava intake. Allergic skin reactions have also been associated with kava kava use. Extrapyrimidal symptoms, including torticollis, involuntary neck, head, and trunk movements, oral and lingual dyskinesia, and impairments in movement and visual coordination have been occasionally reported by kava kava users, in the absence of cognitive impairment.
- Kava kava use has been associated with rare but severe liver damage. Kava kava consumption should be discontinued immediately and a qualified health professional should be sought if any of the following signs of hepatotoxicity occur: unusual fatigue, weakness, loss of appetite, unintentional weight loss, yellow discoloration of the skin or ocular conjunctiva, dark urine, or discolored stools. Individuals with a history of liver disease and those taking medications that can cause liver damage should not take kava kava.

Use During Pregnancy and Lactation

Information on the safety of kava during pregnancy and lactation is limited. While there is no evidence of mutagenic, teratogenic, or genotoxic potential using standard assays of kava kava, or the synthetic product kavain with identical actions in animal models, use of this herb is entirely contraindicated during pregnancy due to potential hepatotoxic and central nervous system effects on the maternal-embryonic/fetal dyad. Similarly, it is contraindicated for use during lactation and for children under 18 years old.

Red Clover

Botanical name: *Trifolium pratense*

Plant part(s) used: Flowering tops and leaf

Actions

- Alterative
- Phytoestrogen
- Mild antitussive

Historical Use

Red clover has traditionally been used as an alterative in the treatment of acute and chronic skin diseases including acne, eczema, and psoriasis, and it is commonly found in herbal formulae for treating cancer, including the famous Hoxsey formula. Numerous so-called "Trifolium Compounds" were marketed as blood purifiers to "help clear the body of toxins." Red clover was listed in the National Formulary as a skin remedy until 1946. It has also been used traditionally for the treatment of upper respiratory conditions including acute and chronic cough, asthma, and pertussis.

- Acne
- Eczema
- Psoriasis
- Cancer treatment
- Cough

Modern Clinical Indications

- Prevention and treatment of menopausal symptoms including hot flashes and vaginal dryness
- Hormone replacement therapy substitute
- Prevention and treatment of osteoporosis
- Hypercholesterolemia
- Acne and chronic skin disease

In recent years red clover has become an exceedingly popular herb for the treatment of menopausal complaints including hot flashes, vaginal dryness, and osteoporosis. It is one of the most popular herbal products in Europe and the US for the prevention and treatment of menopausal complaints, particularly hot flashes. Promensil is a commonly used red clover product, and the product used in many of the red clover clinical trials.

Preparation and Dose

Dried blossoms: 4 g in infusion 3x daily

Tincture: 1.5-3 ml 3x daily

Red clover isoflavones: 40-160 mg red clover isoflavones daily

Commonly combined with

- Alteratives for skin care
- Antitussives for cough
- Mineral rich herbs for bone support
- Herbs to support menopausal changes
- Phytoestrogenic herbs

Major Safety Information

- Widely used in Europe and the US for the prevention and treatment of menopausal complaints, with a very high safety profile.
- The limited number of human clinical trials using red clover, even up to 1 year, show excellent tolerance and no significant adverse effects.
- It is theoretically contraindicated for women taking HRT due to possible competitive inhibition with the drugs.
- Red clover has also bee contraindicated with heparin, ticlopidine, and warfarin, based on its coumadin content. However, unless red clover herb is fermented, it is unexpected to have any anticoagulant effects.
- The safety of consumption by women with a history of estrogen-receptor (ER) positive cancer is unclear. While it may have competitive binding effects with stronger endogenous estrogens, and may thus actually reduce risks associated with elevated estrogen levels, an in vitro study demonstrated that red clover was equipotent to estradiol in its ability to stimulate cell proliferation in estrogen receptor positive breast cancer cells. Regular consumption of soy has been associated with a decreased risk of breast cancer, but the results cannot necessarily be extrapolated as soy contains additional compounds not found in red clover. Further, isoflavones can variably act as ER agonists or antagonists. Until more conclusive evidence is available, it is possible for women with a history of ER positive breast cancer to avoid using red clover.
- Concerns have also arisen over the safety of consuming red clover due to risks of uterine cancer associated with taking unopposed estrogen. Preliminary studies of less than 6 months have found no increases in endometrial thickness based on ultrasound examination. No changes in GnRH, SHBG, FSH, LH, vaginal cytology, or endometrial thickness have been seen in studies of women taking the red clover compared with placebo, even over one year. Nonetheless, as with those with breast cancer, women with a history of endometrial hyperplasia might be prudent to avoid regular consumption of red clover supplements.

Use During Pregnancy and Lactation

The medicinal use of red clover is not recommended in pregnancy. Infertility and abortion have been observed in cattle grazing extensively on red clover. *The Botanical Safety Handbook* rating is Class 2b, not to be used in pregnancy. Small amounts in beverage teas are not considered a problem.

Sage

Botanical name: *Salvia officinalis*

Plant part(s) used: leaf

Actions

- Antihidrotic
- Anti-lactagogue
- Antimicrobial
- Spasmolytic, carminative
- Other: anticholinesterase, antioxidant, hypoglycemix, possible estrogenic effects

Historical Use

Sage has been used in women's herbal medicine for conditions as varied as excessive breast milk production (or to dry up breast milk for example, after a stillbirth), to enhancing the memory, the latter according to the herbals of Gerard and Culpepper. It has also been used as a common household remedy for sore throat, often as a gargle.

Modern Clinical Indications

- Improve memory; Alzehimer's disease (*Salvia lavandulaefolia*)
- Excessive night sweats with menopause
- To dry up breast milk

The anticholinesterase activity of Salvia spp. in vitro has shown promise in the potential treatment of Alzheimer's disease, an interesting finding given the traditional use of sage for memory decline. A double-blind placebo-controlled study using the oil of S. lavandulaefolia in doses of 50 microliters /day dramatically improved word recall in healthy participants. A 6-week open-label phase II pilot study of this product given to 11 patients with Alzheimer's disease showed a statistically significant reduction in neuropsychiatric symptoms and improved attention. The only adverse effect seen in the latter trial was an increase in blood pressure at the highest Salvia dose in 2 patients with baseline hypertension.

Preparation and Dose

Dried leaf preparations: used for drying up breast milk. Take 2-3 cups daily made with 1-4 g of herb for 1 week

Tincture: 1-3 mL up to twice daily for night sweats

S. lavandulaefolia: dose not established

Commonly combined with:

- Menopausally-related herbs
- Antimicrobials

Major Safety Information

In large quantities and with prolonged use, sage, due to its high thujone content, may lead to neurotoxic effects, renal damage, convulsion, vomiting, and seirures. Sage oil should never be used internally. The species used for memory enhancement is Salvia lanandulaefolia (Spanish sage) due to its lower thujone content.

Use During Pregnancy and Lactation

Sage is a strong abortifacient and should be entirely avoided during pregnancy. It is an anti-lactagogue and thus should not be taken during lactation if continued breastfeeding is desired. Normal small culinary amounts are an exception.

St. John's Wort

Botanical name: *Hypericum perforatum*

Plant part(s) used: Flowers, upper 6-8" of the aerial portion of the herb including leaf and flower

Actions

- Nervine
- Antidepressant
- Antiviral
- Neuro-trophorestorative
- Vulnerary

Historical Use

- Urinary complaints
- Depression/Hysteria
- Neuropathic pain
- Wounds, Ulcers, Bruises

St. John's wort (SJW) has been a famed vulnerary and anti-depressant herb used since the Greco-Roman times. In ancient medical history, however, depression was not the likely diagnosis — a patient was said to have been afflicted by evil spirits or other psychic malady.

Modern Clinical Indications

- Mild to moderate depression
- Mild sedative and nerve tonic for excitability, anxiety, and nervous irritability
- Mild sedative/analgesic for neuralgia, neuropathy, and sciatica
- Antiviral for both internal and topical prevention and treatment of Herpes simplex virus (HSV)
- Neurovegetative menopausal complaints
- Topical wound healing, for example, burns, ulcers, postpartum perineal healing, hemorrhoids, sore cracked nipples during lactation, and vaginal abrasions in vaginitis and perimenopausal vaginal atrophy and associate vaginal dryness
- Cystitis, urinary frequency and urgency, interstitial cystitis

King's American Dispensatory (1898)

Harvey Wickes Felter, M.D.,

John Uri Lloyd, Phr. M., Ph. D.

COMMON NAME—St. John's wort.

Action, Medical Uses, and Dosage.—Astringent, sedative, and diuretic. Used in suppression of the urine, chronic urinary affections, in diarrhoea, dysentery, worms, jaundice, menorrhagia, hysteria, nervous affections with depression, hemoptysis, and other hemorrhages. Hypericum has undoubted power over the nervous system, and particularly the spinal cord. Homoeopathic physicians regard it as the arnica of that structure. It is used in injuries of the spine and in lacerated and punctured wounds of the limbs to prevent tetanic complications and to relieve the excruciating pains of such injuries (Scudder). It is highly valued by Webster in spinal irritation when, upon gentle pressure upon the spinous processes of the vertebrae, burning pain is elicited. Throbbing of the whole body in nervous individuals, fever being absent, is said to be a good indication for hypericum. Externally, hypericum may be used in fomentation, or used as an ointment for dispelling hard tumors, caked breasts, bruises, ecchymosis, swellings, ulcers, etc. The blossoms, infused in sweet oil or bear's oil, by means of exposure to the sun, make a fine, red balsamic ointment for wounds, ulcers, swellings, tumors, etc. A very excellent ointment for tumors, ecchymosed conditions, etc., may be made by adding to 1 pound of lard, 1/2 pound of the recent tops and flowers of St. John's wort, and 1/2 pound of fresh stramonium leaves; bruise all together, expose to a gentle heat for an hour, and strain. Dose of the powder, from 1/2 to 2 drachms; of the infusion, from 1 to 2 fluid ounces. The dose of the strong tincture is from 1/2 to 10 minims. The saturated tincture of the fresh herb (viii to alcohol, 76 per cent, Oj) is nearly as valuable as that of arnica for bruises, etc., and may be substituted for it in many instances.

Specific Indications and Uses.—Spinal injuries, shocks, or concussions; throbbing of the whole body without fever; spinal irritation, eliciting tenderness and burning pain upon slight pressure; spinal injuries, and lacerated and punctured wounds of the extremities, with excruciating pain; hysteria; locally to wounds, contusions, etc.

In our modern era, mounting evidence from clinical trials, especially those conducted in the 1980s and 1990s, established the efficacy and safety of standardized SJW extracts for treating mild to moderate depression, and practically overnight, SJW became a "household alternative" for the natural treatment of depression as well as a multi-million dollar boon for the natural products industry. While SJW remains a top-selling herb, reports of potentially serious herb-drug interactions, as well as widely-publicized but poorly conducted studies questioning its efficacy have led to some decline in its popularity as a treatment for depression.

SJW is indicated for mild to moderate depression. Herbalists additionally commonly prescribe SJW as a mild sedative and nerve tonic for excitability, anxiety, and nervous irritability, for pain relief from neuralgia and sciatica, as an antiviral for both internal and topical prevention and treatment of Herpes simplex virus (HSV), and for neurovegetative menopausal complaints particularly anxiety and sleep difficulties, typically in

combination with other herbs. It is commonly included as a vulnerary — or wound healing herb — in formulae for the treatment of cuts, scrapes, and puncture wounds, as well as to soothe and heal the perineum with or without perineal lacerations after childbirth, to soothe and reduce hemorrhoids, and for the treatment of vaginal abrasions in vaginitis and those that can occur with perimenopausal vaginal atrophy and vaginal dryness. Herbal practitioners may also include SJW in formulae for the treatment of cystitis, urinary frequency and urgency, interstitial cystitis.

Preparation and Dose

Dried herb: 2-4g as an infusion three times daily

Tincture: 2-4 ml three times daily

Clinical trial doses: 240-1800 mg daily standardized to varying concentrations of hypericin and hyperforin for a minimum of 4 to 6 weeks. Dosing in depression clinical trials suggests a starting dose of 300 mg of SJW standardized to 0.3% hypericin (and possibly also to 2-5% hypericin) three times daily with a maintenance dose of 300-600 mg per day.

Topical use: as needed

Commonly combined with

- Adaptogens
- Analgesics
- Antidepressants
- Antivirals/Antimicrobials
- Anxiolytics
- Nervines
- Topical vulneraries, emollients, astringents

Major Safety Information

SJW is considered a generally well-tolerated herb, even when taken continuously for up to 8 weeks. Adverse reactions are usually mild and included skin reactions, GI symptoms, fatigue, sedation, restlessness, dizziness, dry mouth, and headache, with few side effects, most notably photosensitivity and mania, reported in clinical trials. Studies of chronic toxicity in animals have shown only non-specific symptoms such as weight loss. Rarely, skin reactions such as pruritis and rash have been reported, with a drug monitoring study of 3250 patients showing 17 allergic reactions. A European review of adverse reactions from 1991-99 involving nearly 8 million people documented only 95 adverse reactions. Three case reports in the literature suggest the possibility of phototoxicity in patients taking SJW. Two of the cases involved patients receiving laser or UVB treatments. Phase 1 trials of IV and oral hypericin in adult patients with HIV demonstrated severe cutaneous phototoxic reactions in 11 of 23 subjects, and a variety of photosensitivity reactions in 14 of 19 hepatitis C patients. Several additional studies have confirmed similar findings particularly at high doses of hypericin or high UVA light. One study did not find phototoxic effects. Patients receiving UV treatment are advised to avoid SJW use during treatment and those with fair skin are advised to avoid sun exposure of skin while taking SJW internally or topically. Anorgasmia has been reported in 25% of patients taking 900-1500 mg SJW daily for 8 weeks versus 32% taking sertraline

and 16% taking placebo, in additional to 2 published case reports of sexual dysfunction in patients taking the herb for mood disorders. Frequent urination was also seen in 27% of patients taking 900-1500 mg SJW daily for 8 weeks versus 21% taking sertraline and 11% taking placebo.

SJW, through its actions on the hepatic metabolism of drugs specifically via induction of the cytochrome system, may lead to changes in the plasma level of a number of drugs, preventing a patient from achieving appropriate therapeutic levels. There is evidence from clinical trials and case reports that SJW may interact with the following medications:

- Antiarrhythmics/Calcium channel blockers: May lead to decreased plasma levels of digoxin, verapamil, and nifedipine
- Anticonvulsants: May lead to decreased plasma levels of phenytoin
- Anticoagulants: May lead to decreased plasma levels of warfarin
- Antidepressants: May lead to decreased plasma levels of amitriptyline (a tricyclic antidepressant) and the SSRIs paroxetine, fluoxetine, and trazadone. Serotonin syndrome can result from reduced serum levels of SSRIs.
- Antihistamines: Fexofenadine (single dose may increase while continued use may decrease plasma level of drug)
- Antipsychotics & anxiolytics: May lead to decreased plasma levels of buspirone, quitazepam, midazolam and alprazolam
- Antiulcer agents: May lead to decreased plasma levels of omeprazole
- Antivirals: May lead to decreased plasma levels of indinavir
- Chemotherapeutic agents: May lead to decreased plasma levels of irinotecan and imatinib
- Hormonal contraceptives: May lead to decreased plasma levels of hormonal birth control/oral contraceptives
- Immunosuppressants: May lead to decreased plasma levels of cyclosporine and tacrolimus
- Reverse transcriptase inhibitors: May lead to decreased plasma levels of nevirapine
- Skeletal muscle relaxants: May lead to decreased plasma levels of chlorzoxazone
- Statins: May lead to decreased plasma levels of simvastatin

Use During Pregnancy and Lactation

The safety of SJW taken internally during pregnancy and breastfeeding, both in terms of effects on the mother and her child, remain unknown at this time. Due to this, the herb is generally not recommended for internal consumption during pregnancy and lactation. Given the widespread incidence of depression in society, and the relatively high incidence and serious consequences of postpartum depression on the health of mother, baby, and their relationship, as well as the family overall, research into SJW for prophylaxis and treatment of depression during the childbearing years should be explored in carefully controlled studies.