Learning Objectives

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

1. Ask a client about, and understand the impact of hot flashes and night sweats on quality of life

2. Discuss the medical treatments for hot flashes and night sweats

3. List and describe the characteristics of the most common botanical treatments for hot flashes and night sweats as presented in this lesson and the associated required reading
Required Reading

*Botanical Medicine for Women’s Health* (Romm)
- In Menopausal Health, see Hot Flashes and Night Sweats

*Principles and Practice of Herbal Medicine* (Mills and Bone)
- Review relevant herb monographs from Key Botanicals list below

Supplies
- 1 oz sage tincture
- 1 oz black cohosh tincture
- 1 oz passionflower tincture

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.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Formication</td>
<td>Hot flash</td>
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<tr>
<td>Hot flash</td>
<td>Vasodilatation</td>
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<tr>
<td>Hot flush</td>
<td>Hyperthyroid</td>
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<tr>
<td>Hypotension</td>
<td>Vasomotor</td>
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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 sinensis*
- *Humulus lupulus*
- *Cimicifuga racemosa*
- *Salvia officinalis*
- *Glycine max*
- *Trifolium pratense*

Also consider Adaptogens and Nervines. Avoid the heating adaptogens, for example, ginseng. American ginseng and ashwagandha are excellent options to consider as is Schisandra. Ashwagandha is considered slightly warming in Ayurveda, but is an excellent nerve and is not excessively heating. Warming herbs can also be modulated with the addition of slightly cooling herbs.
Introduction

Hot flashes (or hot flushes if you’re from the UK), which are experienced by as many as 75% of menopausal women in the US, are a result of the body getting overheated and cooling itself down, just like what occurs with intense exercise, however in the perimenopause, hormonal changes trigger the heat rather than running to second base! Hot flashes are typically preceded by the feeling that one is coming on, followed by the sensation of heat creeping over the face, neck, and upper chest which quickly progresses to a generalized feeling of being overheated. Some women may experience cold sweats, a feeling of insects crawling on their skin (formication – notice the “m” rather than “n” in the spelling coming from the Latin for ant – formica), or a feeling of pins and needles instead of or in addition to hot flashes. Women may also become light headed, dizzy or faint from hypotension that can occur during an episode. While hot flashes are not at all dangerous, they can be terribly uncomfortable and cause significant embarrassment depending upon when they occur! Hot flashes typically last from one to several minutes – but to the woman it can feel like it’s going on forever! Some women report one or two each day – other women report dozens of hot flashes daily! Clearly there is a theme to the hot flashes, but also a tremendous amount of individual variation in the experience. Night sweats are simply the result of hot flashes with their sweating and cooling phase occurring in a woman’s sleep – with the wet part often waking her up to drenched linen.

Many women consider hot flashes the worst of the perimenopausal symptoms. There has been an effort in the alternative health movement to reframe the experience of hot flashes into something positive – for example, energy rushes, power surges, etc. For many women this can be a helpful way to embrace the power and intensity of the changes they are going through, but for others, hot flashes are just plain uncomfortable and they would really like to help lessen their intensity, frequency, or both. While it rarely hurts to reframe something – as Ella Fitzgerald said, “You’ve got to Ac-Cent-Tchu-Ate The Positive” – for many women, it is also helpful to have concrete tools for being physically comfortable while they go through so many changes!

It’s no surprise, I’m sure, to students in this course, that there may be something to the cultural beliefs, dietary, and lifestyle practices of women in the US that lead to women experiencing hot flashes (thus reframing ideas about menopause can sometimes be helpful). The WHO reports that vasomotor symptoms are not as problematic for most menopausal women worldwide as they are for women in the US and other westernized nations.

Here’s a breakdown of the rate of hot flashes in a few other countries:

Mayan women 0%
Hong Kong 10-22%
Japan 17%
Thailand 23%
Key Symptoms
Sensation of heat creeping over the face, neck, and upper chest which quickly progresses to a generalized feeling of being overheated. Typically preceded by the feeling that a hot flash is about to start.

Other symptoms may include:
- cold sweats
- formication
- pins and needles sensation
- light headed, dizzy or faint feelings

Key Diagnostic Findings
Hot flashes are a clinical diagnosis. Rarely, hyperthyroid disease, pheochromocytoma, or carinoid tumor can masquerade as hot flashes. Taking niacin can also cause the sensation of hot flashes.

Conventional Treatment
Conventional treatment strategies are presented in Botanical Medicine for Women’s Health.

Botanical Treatment Strategies
In addition to general dietary recommendations to benefit perimenopausal women and minimize discomfort, including regular consumption of whole foods rich in phytoestrogens, herbalists recommend a combination of “cooling” herbs, nervines, and adaptogens as well as other herbs if there are concurrent symptoms (for example, insomnia, irritability, or depression). Adaptogens can play an important role in regulating the sympathetic response, thereby reducing stress as a hot flash trigger, and improving the stress response. Below are several sample hot flash formulae that are quite effective. Note that black cohosh tincture is taken as a simple when taking other formulae; this is only 1 dose of black cohosh at 3 mL even if several of the protocol are used (not 3 mL with each formula).
Protocol 1: Hot flashes and Night sweats without accompanying symptoms

• Cool Down Tincture

Mix the following tinctures:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hops (Humulus lupulus)</td>
<td>30 mL</td>
</tr>
<tr>
<td>American ginseng (Panax quinquefolium)</td>
<td>30 mL</td>
</tr>
<tr>
<td>Lemon balm (Melissa officinalis)</td>
<td>20 mL</td>
</tr>
<tr>
<td>Blue vervain (Verbena officinalis)</td>
<td>10 mL</td>
</tr>
<tr>
<td>Lavender (Lavendula officinalis)</td>
<td>10 mL</td>
</tr>
</tbody>
</table>

Total 100 mL

Dose: 2-4 mL, 2-4 times daily

• Cool Down Tea

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sage leaf (Salvia officinalis)</td>
<td>1 tsp</td>
</tr>
<tr>
<td>Spearmint leaf (Mentha spicata)</td>
<td>½ tsp</td>
</tr>
<tr>
<td>Lavender flower (Lavendula officinalis)</td>
<td>½ tsp</td>
</tr>
</tbody>
</table>

Steep 2 tsp/cup of boiling water for 10 minutes (keep covered while steeping to retain the important volatile oils). Strain. Take 1-2 cups/day divided into ¼ cup doses.

• Take 3 mL black cohosh (or equivalent) twice daily with the tea or tincture.

• Take a warm bath with lavender oil and practice progressive relaxation while going to sleep.

• A small pillow filled with hops and lavender is an ancient sleep remedy.
Protocol 2: Hot flashes and night sweats with anxiety and stress

• Cool and Calm
Mix the following tinctures:

<table>
<thead>
<tr>
<th>Tincture</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hops (Humulus lupulus)</td>
<td>20 mL</td>
</tr>
<tr>
<td>Skullcap (Scutellaria laterflora)</td>
<td>20 mL</td>
</tr>
<tr>
<td>Kava kava (Piper methysticum)</td>
<td>20 mL</td>
</tr>
<tr>
<td>Ashwagandha (Withania somnifera)</td>
<td>20 mL</td>
</tr>
<tr>
<td>Licorice (Glycyrrhiza glabra)</td>
<td>20 mL</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100 mL</td>
</tr>
</tbody>
</table>

Dose: 2-4 mL, 2-4 times daily.

• Cool Down Tea
Recipe and dosing above.

Protocol 3: Hot Flashes, Night Sweats and Insomnia/ Irritability

• Calm in the Storm
Mix the following tinctures:

<table>
<thead>
<tr>
<th>Tincture</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hops (Humulus lupulus)</td>
<td>30 mL</td>
</tr>
<tr>
<td>Passionflower (Passiflora incarnata)</td>
<td>30 mL</td>
</tr>
<tr>
<td>Bupleurum (Bupleurum falcatum)</td>
<td>15 mL</td>
</tr>
<tr>
<td>Ashwagandha (Withania somnifera)</td>
<td>15 mL</td>
</tr>
<tr>
<td>Cramp bark/black haw (Viburnum opulus/prunifolium)</td>
<td>10 mL</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100 mL</td>
</tr>
</tbody>
</table>

Dose: 1-3 mL, for 4 doses, staggered over 1-2 hours prior to attempting sleep.

• Take a warm bath with lavender oil and practice progressive relaxation while going to sleep.
• A small pillow filled with hops and lavender is an ancient sleep remedy.
• Take 3 mL black cohosh (or equivalent) bid with the tincture.
TCM and Hot Flashes

In TCM, hot flashes and night sweats are associated with Kidney deficiency, and may be treated with a formula such as Eight Immortals, a Kidney Yin Tonic. Schisandra (wu wei zi) is an adaptogen, and in TCM is used for excessive spontaneous sweating.

Mai Wei Di Huang Wan (Eight Immortals)
Rehmannia  Dioscorea  Peony Bark  Lilyturf
Cornus  Alisma  Poria  Schizandra

Tasty Phytoestrogens! Tofu-Shiitake Stir-Fry
Chop finely:

1" cube fresh ginger
2 cloves fresh garlic

Blend with:

2 tbsp. soy sauce

Pour this over:

1/2 lb. firm tofu, cut in 1/2" cubes (increase tofu to taste)

Let this marinate while preparing vegetables below:

1 red bell pepper, cut in triangles
3 - 4 fresh shiitake mushrooms, sliced (3 - 5 dried)
½ cup snow peas

Heat a wok with 1 Tbsp oil. Add peppers, stir-fry one minute. Add mushrooms and snow peas, stir-fry one minute. Add the tofu and marinade, stir-fry one minute, then cover and steam until hot. Serve over brown rice.
Additional Strategies

Adjunct strategies and little tips can be really helpful for women bothered by hot flashes and night sweats — preventing them from coming on, cooling the heat wave, and reducing stress and anxiety about the heat!

- Sip cool water with lemon or lime throughout the day; stay well hydrated. Mint sun tea is also great to sip on - and a little spritz to the face or neck now and then can be refreshing, too!

- Deep, slow breathing techniques can help a woman calm down when the heat starts to rise, and is especially helpful for cooling out the emotional heat if tempers start to rise at work and bring on a hot flash!

- Wear light clothing in natural fiber and use peelable layers to control heat and warmth. Keep an extra dry shirt on hand in the event of a drenching sweat!

- Wear cotton or very light woolen knits – silk, thick woolens, and synthetic fibers retain heat. Similarly, sleep under cotton sheets and cotton quilts.

- Avoid spicy foods when you want to avoid hot flashes.

- Include phytoestrogen-rich foods in the diet.

- Avoid caffeine, except green tea (and the occasional piece of dark chocolate!).

- Keep alcohol to a minimum with the exception of an occasional glass of red wine if desired (not more than 1 glass/week).

- Take a cool shower before bed.

- Keep a small fan near the bed and run on a low breeze to keep the air above the bed cool and circulating.

- Keep a set of sheets and change of night clothes near the bed to ease the burden of changing the bedding should a night sweat occur; take care to avoid chills.

- Carry a small spritz bottle with sage and lavender teas or lavender aromatherapy spray to which is added 3-4 drops of sage essential oil for quick cool downs. Mint is also refreshing.

Questions to Ask

Ask about other symptoms: If other symptoms not consistent with hot flashes alone are occurring, for example, symptoms of hyperthyroid disease, a medical evaluation is warranted.

Cautions

Care should be taken in phytoestrogen supplementation for women with a history of risk factors for estrogen dependent cancers.
Case

Identification/Chief complaint: Dora, a 50-year old Caucasian woman tells you, “I am having intense hot flashes and night sweats that are leaving me exhausted by morning. Otherwise, I feel great!”

History of Present Illness: Dora is just a few months past her 50th birthday. Her 50th birthday party was wonderful — so many friends and family members gathered in one place! But one glass of champagne was too many and she experienced a hot flash that made her want to rip her clothes off and jump in the pool, and it was a January birthday! She’d been having mild hot flashes (“warm flashes,” she laughs) for a few months prior to this episode, but since, they’ve been getting worse, and she has been awakened by troublesome night sweats that interrupt her sleep and leave her exhausted. She’s comfortable with aging and changing, but is feeling miserable about how tired and uncomfortable she is with this new and overwhelming experience of her body.

Past medical history: Appendectomy age 24; ovarian cysts in 20s – L ovary removed; IBS-like symptoms in her 30s during a period of intense stress but no problems since.

Family history: Mother has CVD diagnosed at age 62 (now 79); father had a stroke at age 82 (now age 84).

Social history: Maried with 3 grown children; works as a college English teacher; does not smoke, rare occasional alcohol intake; “whole foods” type diet in the past 6 months but healthy version of American diet prior, 1-2 cups of coffee per week; occasionally dark chocolate in a women’s energy bar. Treadmill and free weights 3x/ week or 45 minutes each; walks the dogs 1 mile each morning or evening.

Psychiatric history: No history mental/emotional problems. Saw a therapist in her 30s when she had IBS symptoms; this occurred prior to divorcing her first husband.

Gynecologic history:

- History of ovarian cysts and L ovariectiony
- 3 vaginal births in a birthing center in NYC, no complications.
- Menses regular most of her life; irregular and lighter in her mid 40s, now only every 2-3 months and variable light to medium flow.
- Currently enjoys a healthy sexual relationship with her husband.

Review of systems: Poor sleep since night sweats; occasional bloating and gas

Physical exam: Dora is about 5’5” and 130 pounds; she appears in excellent health, looking quite a bit younger than her age – only her gracefully graying hair gives her age away.

Labs/Data: N/A
Case Discussion: Formulating a Plan

What do you know about Dora’s case?

We know that Dora is at the age when we’d expect her to be perimenopausal, and given that she isn’t experiencing other symptoms beyond irregular menses, also consistent with perimenopause, we can assume her hot flashes are just due to normal changes. She truly does seem comfortable with her body and with the aging process, but these hot flashes are clearly interrupting her sense of comfort. We also know from her family history that there is a significant history of heart disease and that we have an opportunity both to educate her about caring for her heart health and to include cardioprotective herbs in her overall herbal plan.

What do you need to know?

It is important to question Dora about whether she has had her age-appropriate health screenings, for example, for breast cancer and colorectal cancer. Is there any personal or family history of hormonally sensitive cancers? Also, given her history we want to know whether she has had an evaluation of her cardiac function (i.e., stress test). We also want specifics on her diet and any supplements she is already taking (she tells you she takes a multivitamin and mineral supplement and a fish oil supplement regularly.)

Protocol and Formulas for Hot Flashes and Night Sweats

Protocol 1 (see sample herbal formulas above)

Hot flashes and Night sweats with no other accompanying symptoms: Use the cool down tincture throughout the day and again just prior to bed; take the tea 1 hour before bed for mild disturbances, or 2-3 cups/day if more troublesome. These can be taken together (the tincture can be added directly to the tea) or separately.

When do you want to see Dora again and what can she expect in terms of improvement?

Dora should see some small improvements in a matter of a few days to a week. Checking in by phone in 1-2 weeks is probably all she needs. If she has any change in symptoms or side-effects (i.e., heavier periods) then she should call you so you can adjust the formula.
Select the best answer for the following multiple choice questions.

1. In addition to the concerns she reported in her health history with you, Dora (from case in lesson) tells you she has been having some difficulty achieving an orgasm for the past few months. Which of the following might you recommend?
   a. SJW
   b. damiana
   c. dong quai

2. You considered including licorice in one of Dora’s formulae but decided not to because she has mild _______.
   a. bowel inflammation
   b. menopausal complaints
   c. hypertension

3. Based on Dora’s family history you decide to include this herb in her formula as a nourishing tonic:
   a. nettles
   c. hawthorn
   c. eleuthero

4. Which of the following can increase hot flashes?
   a. spicy foods, coffee, alcohol
   b. poor sleep, HRT, phytoestrogen
   c. soy, tempeh, miso
5. Sage essential oil can be used __________.
   a. in a spray bottle
   b. ingested orally
   c. a and b

6. In addition to her current symptoms, Dora tells you that she has been periodically experiencing swollen achy legs. Which of the following might you consider adding to her formula or giving separately, specifically for these symptoms?
   a. cramp bark as an antispasmodic
   b. horse chestnut for peripheral vascular insufficiency
   c. skullcap as a nervine

7. Your client is taking a formula that contains hops, kava kava, skullcap, ashwagandha, and licorice. While she finds it quite relaxing, she notices that she sometimes feels drowsy, gets a slight headache, and feels a little restless. Which herb in the formula might you want to remove or decrease the amount of to see if these feelings diminish with its use?
   a. hops
   b. licorice
   c. kava kava

8. Hops and lavender are used in pillows as traditional sleep aids. Which of the following has been used traditionally in pillows to promote dreaming?
   a. mugwort
   b. elder
   c. yarrow
9. Woman who are underweight might experience a ____________ incidence of hot flashes than women of average weight due to ________________ estrogen levels.
   a. decreased, decreased
   b. increased, decreased
   c. decreased, increased

10. *Salvia officinalis* is used for ________ while *Salvia lavandulaefolia* has been researched for ________.
    a. hot flashes, memory decline
    b. memory decline, hot flashes
    c. neither a nor b

**Fill-In the Blank**

11. The botanical name for red clover is ________________.
12. ______ occurs in the circulatory system in order to cool the body in response to a hot flash.
13. Red clover is rich in ________ , a phytoestrogen found in this herb and other legumes.
14. It is postulated that Asian women may have fewer menopausal complaints because of their greater consumption of ____________.
15. While it is thought that this herb does not contain hormonal activity, ________ has been recognized for its beneficial role in relieving some of the complaints of the climacteric, including hot flashes.
16. The German Commission E supports the use of hops specifically for ________.
17. Hops should be used with caution in women with a history of ________ receptor positive breast cancer.
18. Your client has been losing sleep, is feeling forgetful, and is finding her concentration at work to be “a little off.” She has been losing significant amounts of sleep. You create a relaxing nervine formula for daytime use and a sleepytime formula for prior to bed. __________ are a category of herbs might she also take, either in a separate formula or as part of her nervine formula, to support her nervous system and improve her mental function?
19. While Panax ginseng might be overheating for some menopausal women experiencing hot flashes, \underline{___________} ginseng, or Panax quinquefolium is also a reliable adaptogen that might be less stimulating and thus a better choice.

20. The most appropriate adaptogen for a woman with hot flashes, insulin resistance and anxiety is probably \underline{___________} rosea, as it is the most studied adaptogen for treating anxiety.

CASES, FORMULAS, and REFLECTIONS

Hands-On/Clinical

1. List 3 non-soy food sources of phytoestrogens.

2. What is the greatest health concern you might have for Dora (case presented in this lesson)? If Dora had a history of endometrial cancer or major risk factors, which herb(s) might you remove from her formulas?

3. List at least 3 symptoms of sleep disturbance you might see in a woman significantly disturbed by night sweats. How might you advise her to improve her symptoms and sleep?

4. A 48-year old woman tells you that she has been having hot flashes off and on for several months and has not had a period in 3 months. She is experiencing some breast tenderness and thinks she might have a UTI because she is urinating more often than usual. Discuss her symptom picture, how you might approach her case, and what herbal recommendations might be appropriate. Is any medical work up necessary?

5. Using the following tinctures either from your herb kit or purchased/prepared independently, place 3-5 drops on your tongue and note the tastes and sensations. You do not need to submit your observations. If you are pregnant skip this assignment or use just a few drops of black cohosh and passionflower but skip the sage! Allow 5 minutes between tasting each herb.

    1 oz sage tincture
    1 oz black cohosh tincture
    1 oz passionflower tincture