MENOPAUSE

(Handout)

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What is Menopause?

- the changes leading up to menopause happen over several years
- a woman has officially hit menopause when she has not had her period for 12 consecutive months

Every Woman is Different!

- there are many possible signs of menopause, and each woman feels them differently
- most women have none, or very few symptoms of menopause
- however, some women experience many moderate and uncomfortable symptoms
- and for some women, the symptoms may be lifealtering and make it difficult to manage their days and their lives

Menopause Symptoms

Hot flashes/night sweats

- · some women call them "power surges"
- can occur as little as a couple of times a year, to as often as every hour of the day
- precise cause is unknown, but speculation that a lack of estrogen is responsible

Vaginal dryness

- itching, irritation, and painful intercourse due to reduced lubrication
- a direct consequence of decreased estrogen, which leads to dryness and thinning of cells in the vagina and genital area

What is Menopause?

- part of the normal female aging process
- menopause is the end of menstruation (Greek mens menstruation, pausis – cessation)
- ovarian function declines, resulting in decreased production of estrogen and progesterone, and women are no longer able to become pregnant
- average age is 51 years, but can occur anywhere between the ages of 40 and 60

Perimenopause

- refers to the several years before menopause when a woman first begins experiencing signs and symptoms of her menopausal transition
- characterized by fluctuating hormone levels, irregular menstrual cycles, and the onset of symptoms that may increase in number and severity as menopause approaches

Signs and Symptoms of Menopause

- hormone receptors are present in almost all tissues, so when hormone levels drop, the effects can be felt all over the body
- sex hormone receptors are particularly abundant in the brain, blood vessels, reproductive organs, urethra (bladder outlet) and bone
- the clearest signs of the start of menopause is irregular periods (when periods come closer together, or further apart), and when blood flow becomes lighter or heavier

Menopause Symptoms

Mood changes

 hormone imbalances around and during menopause can result in anxiety, depression, irritability, and mood swings

Sleep disturbances

- estrogen deficiency contributes directly to insomnia and/or fragmented sleep
- night sweats can also make it difficult to sleep through the night

Memory Problems

- estrogen (estradiol) is needed for the transport of glucose into the brain
- therefore, too little estrogen can lead to energystarved brain cells and foggy thinking

Menopause Symptoms

Skin

 loss of elasticity, thinning and dryness, associated with the decrease in estrogen

Bladder problems

- declining estrogen levels can cause thinning of the urethra (bladder outlet)
- this may result in frequent bladder infections and/ or urinary incontinence

Weight gain Bloating/Fluid retention Fatigue/Tiredness Joint pain Reduced sex drive

Menopause Symptoms

- some of these symptoms are explained by deficiency of hormones, or a hormone imbalance, while others are not
- most of the time these symptoms will lessen or go away after a woman has finished menopause
- most symptoms last 1-5 years, but in a small minority of women, these symptoms can last a lifetime

What are my options?

- 1. Non-Drug/Self-Care Measures
- 2. Herbal Alternatives
- 3. Hormone Replacement Therapy

Non-Drug Measures

Cool hot flashes

- o wear cotton clothing, use cotton bedding
- o dress in layers
- o use a fan, open windows
- o sip cold water
- get regular exercise
- try to pinpoint what triggers your hot flashes (triggers may include hot beverages, spicy foods, alcohol, caffeine, hot weather, and even a warm room)

Non-Drug Measures

Decrease vaginal discomforts

- use vaginal moisturizers regularly (ie. Replens, Vagisil)
- o use over-the-counter water-based vaginal lubricants (ie. Astroglide, K-Y Jelly) right before sexual intercourse
- o regular sexual activity

Optimize your sleep

- avoid caffeinated beverages and exercise right before bedtime
- practice relaxation techniques (ie. meditation, yoga, tai chi), and deep breathing exercises

Strengthen your pelvic floor

 pelvic floor muscle exercises, called Kegel exercises, can improve some forms of urinary incontinence

Self-Care Measures

Eat well

- eat a balanced diet, that includes a variety of fruits, vegetables and whole grains, and that limits saturated fats, oils and sugars
- aim for 1500 mg of calcium, and 400-800 IU of vitamin D per day

Don't smoke

- smoking increases your risk of heart disease, stroke, cancer, and other health problems
- smoking may also increase hot flashes and bring on early menopause

Exercise regularly

- o get at least 30 minutes of moderate-intensity activity on most days to protect against cardiovascular disease, diabetes, osteoporosis and other conditions associated with aging
- o exercise can also help reduce stress

Self-Care Measures

Manage Stress

- o balance your work and social life
- join a menopause or mid-life support group in your area

Schedule regular check-ups

o talk with your doctor about how often you should receive regular mammograms, Pap tests, cholesterol level testing, and other screening tests

Herbal Alternatives

Why use a herbal menopause remedy?

- you may have tried hormone replacement therapy (HRT) and found it didn't agree with you
- perhaps you have a history which prevents you from considering HRT (ie. a hormone-dependant cancer, or a family history of such cancers, or an increased tendency to thrombosis/ blood clots)
- you may prefer to maintain your mid-life health without using medication, or because of concerns about unknown long-term effects of HRT

(1.) BLACK COHOSH

What is Black Cohosh?

- Actaea racemosa or Cimicifuga racemosa
- a member of the buttercup family, native to North America
- do not confuse with Blue Cohosh and White Cohosh (poisonous)
- shown to decrease hot flashes and help with other menopausal symptoms such as mood

How does Black Cohosh work?

- the primary active constituent, *terpene glycoside*, comes from the roots and bulb (rhizome) of the plant
- previously thought to have an estrogenic effect, but current evidence shows that it binds to serotonin receptors (same receptors that regulate body temperature)
- but estrogenic activity cannot be completely excluded

BLACK COHOSH

Is it safe?

- Black Cohosh is found to be a safe herbal alternative when used orally and appropriately
- however, safety has only been studied up to 6 months (safety and long-term use is unknown)
- women with hormone-dependent conditions (ie. cancers of the breast, ovaries and uterus, endometriosis) should not take black cohosh due to it's possible estrogenic effects

Is it effective?

- no compelling evidence for the efficacy of Black Cohosh on menopausal symptoms, however small beneficial effects were observed in some studies
- Black Cohosh has the most literature, of all the natural health products, to support it's use in decreasing hot flashes and improving mood

BLACK COHOSH

Formulation/Dose

- Tablet (Remifenin)
- most widely used and best studied commercial formulation
- extract of rhizome standardized to 1 mg of terpene glycosides per 20 mg tablet
- Common Dose: 20-40 mg bid
- may take 4-8 weeks before a significant improvement in symptoms

Adverse effects

- generally well-tolerated
- can cause some GI upset, rash and headache (rare, mild)

BLACK COHOSH

Interactions

- unknown
- possible interaction with Tamoxifen and other estrogen receptor blockers

BOTTOM LINE

- Black Cohosh seems to be safe when used for up to 6 months!
- may be effective in relieving hot flashes and other menopausal symptoms, such as mood
- additional randomized-controlled trials (RCTs) are needed to determine efficacy

(2.) SOY-ISOFLAVONES

Where is soy found?

 free soybeans, soy powder, soybean sprouts, tofu, soymilk, soy protein, roasted soy nuts, miso, tempeh or soy extracts

How does soy work in menopause symptoms?

- soy contains isoflavonoid-type phytoestrogens (genistein, daidzein and glycitein)
- it acts as a weak estrogen (if low levels of estrogen, it has estrogenic effects; if high levels of estrogen, it has anti-estrogenic effects)
- it is used to decrease hot flashes in menopause (also used to reduce cholesterol and increase calcium utilization)

SOY-ISOFLAVONES

Is it safe?

- Soy products consumed as part of the diet are found to be a safe herbal alternative
- there is lack of evidence on the safety of soy supplements (most research has been done on people who eat soy products)
- caution if a strong family history of breast cancer, and if allergy to soy or soybeans

Is it effective?

- the findings are mixed
- some studies show a significant reduction in hot flashes, while other studies show no effects at all

SOY-ISOFLAVONES

Formulation/Dose

FDA recommended dose: 50-75 mg isoflavones./day (25-60 g soy protein/day)

Adverse effects

- unknown
- okay if taken in large quantities through food, however less is known about the potential side effects in concentrated capsule/tablet form

Interactions

- estrogens and Tamoxifen
- anticoagulants/antiplatelets
- a high-fiber diet may interfere with the absorption of soy isoflavones

SOY-ISOFLAVONES

BOTTOM LINE

- more RCTs are needed to determine efficacy of soy containing food and supplements in the treatment of menopausal symptoms
- lack of evidence on the safety of soy supplements
- including soy products in a daily diet may still present many health benefits

(3.) RED CLOVER

What is Red Clover?

- Trifolium pretense, a legume from the Leguminosae or Fabaceae family
- the flower top contains 4 estrogenic isoflavones (mostly formononetin and biochanin A, and some daidzein and genistein)

How does it work?

- it acts as a weak estrogen (like soy)
- used to reduce hot flashes in menopause

RED CLOVER

Is it safe?

- likely safe when used orally in amounts commonly found in foods, 25-60 g soy protein/day (50-75 mg isoflavones/day)
- possibly safe when used in medicinal amounts (Promensil contains mg of isoflavones)

Is it effective?

- results have been unclear with conflicting evidence
- a number of clinical trials have been conducted on red clover, however there have been design flaws such as small treatment groups and short duration of trials

RED CLOVER

Formulation/Dose

- Tablet (Promensil)
- provides **m**g isoflavones/day

40

Adverse effects

- generally well-tolerated
- can cause some rash-like reactions, headache, nausea, muscle pain, and vaginal spotting

Interactions

- estrogens and Tamoxifen
- anticoagulants/antiplatelets

RED CLOVER

BOTTOM LINE

 due to the lack of consistent evidence to support it's use and the potential for many interactions, the use of red clover is not recommended for the treatment of menopause symptoms

(4.) WILD YAM

What is Wild Yam?

- a part of the Dioscoreacea family
- the applicable part is the root or tuber, which contains the glycoside, diosgenin, which is thought to be a steroid precursor
- used to decrease postmenopausal vaginal dryness, and to increase energy and libido

Possible mechanism of action?

- thought to be estrogenic/steroid precursor
- however, the chemical transformation of disogenin to estrogen, progesterone, DHEA, or any steroid compound does not occur in humans

WILD YAM

Is it safe?

- possibly safe to use orally
- should be avoided in women with hormone sensitive conditions, since it is possibly estrogenic

Adverse effects

- stimulates growth of mammary tissue
- ingestion of large amounts has caused vomiting

Interactions

none known

BOTTOM LINE

- very little evidence to support the use of wild yam in treatment of menopausal symptoms
- it's use should be avoided!

(5.) DONG QUAI

What is Dong Quai?

- an aromatic herb found in East Asia and China
- part of the Celery family (Angelica Sinesis)
- used to decrease hot flashes and night sweats in menopause

Possible mechanism of action?

may contain phytoestrogens, but largely unknown

Is it safe?

- possibly safe when used orally and appropriately
- caution in Diabetics because it contains a high level of sucrose

DONG QUAI

Adverse effects

- generally well-tolerated
- contains psoralens that may cause photosensitivity
- contains constituents that are carcinogenic, although whether they are present in cancer-causing concentrations is unknown

Interactions

- anticoagulants/antiplatelets

BOTTOM LINE

- literature does not support the use of Dong Quai alone in the treatment of menopausal symptoms
- possible use of the combination products used in traditional Chinese medicine, but further studies are required

(6.) CHASTEBERRY

Possible mechanism of action?

- dopamine agonist
- binding of estrogen receptors
- induction of progesterone

Use

- chasteberry has been shown to treat the symptoms of PMS and irregular menstruation (many studies to support use)
- but no randomized controlled trials to promote it's use in menopause

CHASTEBERRY

Is it safe?

likely safe when used orally and appropriately

Adverse effects

- usually well-tolerated
- may cause GI effects, headache, mild skin rash

Interactions

- antipsychotics/dopamine agonists
- estrogens
- metoclopramide (dopamine antagonist)

BOTTOM LINE

 no evidence to support it's use in menopausal symptoms, therefore not recommended

(7.) EVENING PRIMROSE OIL

What is evening primrose oil?

 obtained from a plant seed, and contains 2-16% gamma-linolenic acid (GLA), 65-80% linoleic acid, and vitamin E

Use

- used for it's anti-inflammatory effects, and in metabolic deficiencies (patients with PMS are thought to have lower levels of GLA)
- taking evening primrose oil orally doesn't seem to improve menopausal symptoms, such as hot flashes and night sweats

EVENING PRIMROSE OIL

Is it safe?

- likely safe when used orally and appropriately

Adverse effects

- generally well-tolerated
- may cause some indigestion, nausea, soft stools and headache

Interactions

- anticoagulants/antiplatelets
- phenothiazines (seizures have been reported)

BOTTOM LINE

has no proven effect on decreasing menopausal symptoms

Other Herbs

 these herbs and many other herbal alternatives have been taken by women in hopes of relieving menopausal symptoms

Others include (with no proven efficacy)

- Burdock Root
- Passion Flower
- Lemon Balm
- very few of the herbal alternatives are proven effective in the relief of menopausal symptoms, although most are safe

BOTTOM LINE OF HERBS

- talk to your doctor to evaluate the risks vs. benefits of herbal alternatives
- Black cohosh seems to be safe (up to 6 months), and may be effective in alleviating some menopausal symptoms, such as hot flashes
- including soy in diet may help
- other alternatives are not shown to be effective
- Knowledge is power!

Hormone Replacement Therapy Is it for me?

- much controversy over HRT
- especially after the Women's Health Initiative Study (WHIS) in 2002

WHI Study

- examined combined oral HRT in over 16000 women
- found that the risks of combined horse estrogen (Premarin®) and medroxyprogesterone acetate (MPA), a synthetic progesterone (Provera®) outweighed the benefits
- these risks included an increase in strokes, heart attacks, blood clots, total heart disease, and breast cancer

Clearing up the Confusion of HRT

But . . .

- the WHIS did not look at the relief of menopausal symptoms
- the average age of women in the study was 63 years, therefore they are already at and increased risk of cardiovascular disease and blood clots
- there was a significant reduction in hip fracture and total fracture rates in patients receiving combined HRT in the study, suggesting that estrogen is good for the bones
- there was also a significant reduction in colorectal cancer
- the hormones used in the WHIS were not natural to the human body

Bio-Identical Hormone Replacement Therapy (BHRT)

- BHRT mimics natural hormones of the human body
- estradiol, estrone and estriol are naturally produced hormones that are commonly used for BHRT
- natural human progesterone has now been micronized to assist in oral absorption
- although there is lack of long-term studies, the evidence for BHRT seems to be pointing in a positive direction

Bio-Identical Hormone Replacement Therapy (BHRT)

- there are numerous commercially available human hormone products, some of which are ideally suited for the purposes of BHRT
- the key point to remember is that human bioidentical hormones are not the enemy of human tissue
- it's a matter of keeping them in balance, giving the right amounts and delivering them in the right way
- delivery of hormones through the skin (transdermal) seems to mimic the natural release of hormones in the body – evidence in favor of this delivery system is steadily accumulating

Benefits vs. Risks of HRT

➤ When deciding if HRT is right for you, weigh the benefits with the perceived risks of therapy

Benefits of HRT

Benefits

- treats menopausal symptoms, such as hot flashes, night sweats, palpitations, and sleep problems
- reduces bone fracture risks and prevents osteoporosis (hormone receptors are abundant in bone)
- reduces risks of heart disease (natural estrogen is essential for healthy functioning blood vessels)
- decreases risk of colorectal cancer by approximately 1/3
- improves cholesterol levels (decreases LDL levels and increases HDL levels)

Risks of HRT

Risks

- side effects of HRT, most commonly resumption of withdrawal bleeding, breast tenderness and fluid retention, and nausea
- endometrial cancer (estrogen alone may increase the risk, therefore adding progesterone counteracts this risk) – women who have had their uterus removed can take estrogen alone
- thromboembolism (blood clots)
- breast cancer (Big Concern!!!)

Breast Cancer and HRT

- o the risk of breast cancer is one of the greatest concerns women have about HRT
- o estrogens may act as initiators of cancer, or as promoters of cancer cell growth
- the concern is more with estrogen metabolites (therefore transdermal estrogen may decrease this risk)
- o not all hormones are considered equal when it comes to breast cancer risk
- o estriol (the weakest estrogen) may have a protective effect against breast cancer
- progesterone may also reduce the risk of developing breast cancer through it's balancing effects on estrogen

Breast Cancer and HRT

Major risk factors for breast cancer may include:

- o age, female
- o never having children, or had first child after 30 yrs
- o early menarche/late menopause (exposure to increased amounts of estrogen throughout lifetime)
- o obesity, sendentary lifestyle
- o alcohol use (>2 drinks/day)
- o family history of breast cancer (not a contraindication to HRT, not as important as people think)

for healthy women, the current consensus among leading gynecologists is that any increased risk of breast cancer from HRT is outweighed by the benefits it provides in preventing heart disease and osteoporosis

Who should not take HRT?

Absolute contraindications:

- pregnancy
- active liver disease/dysfunction
- active thromboembolism
- known breast cancer
- undiagnosed uterine/vaginal bleeding

Relative contraindications:

- personal history of breast cancer
- history of thromboembolism
- migraine headaches
- endometriosis (growth of endometrial tissue outside the uterus)
- gallbladder disease
- chronic liver disease
- uterine cancer

If you are using or are considering HRT

- women should use the lowest effective dose for the shortest duration
- o after 4-5 years, consider discontinuing
- o if still symptomatic after 4-5 years, weigh risks vs. benefits and continue only if necessary
- hormone therapy use should be reassessed yearly

Other Prescription Medications for Menopausal Symptoms

Oral contraceptives (birth control pill)

 to control irregular bleeding and symptoms in women in the early transitional period (Perimenopause)

Clonidine (Dixarit®)

- for hot flashes
- usual dose: 0.5-1 mg bid
- side effects at higher doses limit usefulness
- side effects: drowsiness, dizziness, constipation, dry mouth

Other Prescription Medications for Menopausal Symptoms

Antidepressants – (such as paroxetine (Paxil®), citalopram (Celexa®), venlafaxine (Effexor®))

- for hot flashes
- effects may be seen in as little as 1-2 weeks
- various side effects, such as nausea, dry mouth, dizziness, sweating and sexual dysfunction

Gabapentin (Neurontin®)

- o for hot flashes
- dose: initially 300 mg at bedtime, up to 300 mg tid
- may cause drowsiness or dizziness

Restoring Hormone Balance

- it isn't always a simple process
- women are not "one-size-fits-all" creatures
- may be best addressed with lifestyle, dietary and herbal alternatives, rather than HRT
- for some women on HRT, it may simply involve switching from non-human/synthetic hormones to natural/bio-identical hormones

Menopause is one of woman's many important natural lifestages.

For some, it's a challenging period of difficult physical and emotional changes.

For others, it is a time of personal growth and renewal.

And for many women, it is both at the same time.

The decision is up to you!

The decision of whether to manage your symptoms on your own, or through Hormone Replacement Therapy is ultimately up to you.

Talk with your doctor, weigh the risks and benefits of HRT, and discuss which options are best suited to you and your individual needs.

THANK YOU

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