Menopause: Life Beyond the Women’s Health Initiative

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OBJECTIVES
1. Define menopause.
2. Discuss the findings and recommendations of the Women’s Health Initiative (WHI).
3. List five non-pharmacologic treatments for women experiencing menopause.
4. Describe three pharmacologic approaches for the relief of menopausal symptoms.

Definitions

Climacteric/perimenopause
- “rungs on a ladder”
- the 2 – 7 years prior to & the first year of menopause

Menopause
- meno = menses
- pause = cessation
- the permanent cessation of menses resulting from loss of ovarian follicular activity and the absence of menses for one year
- When follicle stimulating hormone (FSH) levels are consistently elevated (>30 mIU/mL) in the absence of other obvious pathologic causes.

Postmenopause

Early post menopause
- Final menstrual period (FMP) through the next 5 years

Late post menopause
- From 5 years post FMP until death

The Ages of Menopause

40 – 58 years of age is the average age range for menopause (51 years = average)

Premature menopause
- Natural menopause occurring < 40 years of age

Early menopause
- Natural menopause occurring < 45 years of age (includes premature menopause)

Menopause

Etiology
1) decline from 6 million follicles at birth to approximately 10,000 at menopause
2) follicles produce estrogen & progesterone
3) decline in estrogen & progesterone production leads to increase in FSH production by the anterior pituitary

Hysterectomy, chemotherapy, radiation,
Menopause (cont.)

Sign & symptoms
1) some women transition through menopause with few symptoms, for some, the symptoms are debilitating
2) estrogen receptors on the surface of every tested cell (inc. retina, skin, various organs & organ systems)

Menopause (cont.)

Sign & symptoms (cont.):
3) Primary menopausal symptoms
   a) Vasomotor (hot flashes, night sweats)
   b) Genitourinary (atrophy, bladder infections, prolapse)
   c) Psychosocial (depression, mood swings, sleep disturbances, forgetfulness)
   d) Cardiovascular (arrhythmia, atherosclerosis)
   e) Skeletal (BMD/osteoporosis)

Menopause (cont.)

Because hormone levels may fluctuate greatly in an individual woman, even from one day to the next, hormone levels are not a reliable method for diagnosing menopause.

Menopause (cont.)

Diagnosis
Amenorrhea for 12 months during appropriate age frame

Menopause (cont.)

Diagnosis by hormone levels
   a) FSH that exceeds 30 mIU/ml on 2 occasions 1 week apart
   b) LH above 50 mIU/ml
   c) Estradiol levels below 15 pg/ml

Menopause = Transition

Menopause is a time of transition
Each woman experiences menopause in her own unique way
Media view of menopausal women
Native American view of menopause
Perimenopause/climacteric

- Management of all women
  - Healthy lifestyle
  - Lipid profile/TSH/Colonoscopy
  - Pap, pelvic, mammogram
  - Calcium supplements (1500 mg elemental calcium)
  - Calcium citrate easily absorbed
  - Enteric coated baby aspirin
  - 20mcg OC appropriate treatment for certain perimenopausal women

Menopause

- Pharmacologic management has changed dramatically since the Women’s Health Initiative (WHI) was published

Women’s Health Initiative (WHI)

- Study began in 1990s
- Made a defiant statement against excluding women in scientific trials
- More than 160,000 participants
- One out of every 200 post-menopausal women aged 50 to 79yrs old tracked for next 7 – 12 years
- 17.5% minority women

WHI (cont.)

THE HORMONE STUDY

- The question being studied:
  - Should hormones be prescribed for all older women to prevent heart disease?

WHI (cont.)

- Participants:
  - Post-menopausal women aged 50 to 79yrs
    - 16,600 women with uteruses
      - estrogen plus progesterone (prempro) placebo group
    - 10,739 women with hysterectomies
      - estrogen alone (premarin) placebo
- Estrogen plus progesterone trial stopped in 2002 (after 5 years)
  - No benefit for heart disease found
  - Increase in heart disease
  - Significant risks for breast cancer (26% increase), stroke (41% increase), and embolism (50%)
  - 37% decrease in colorectal cancer
  - 33% reduction in hip fractures
WHI (cont.)
- Estrogen only trial stopped in 2004 (after 7 years)
  - No benefit for heart disease
  - Increased risk for stroke
  - No increased risk for breast cancer
  - Lower risk of hip fracture
  - Women ages 50–59 had a 34% reduction of heart attacks, heart bypass surgery, and angioplasty compared to placebo group
  - Women 60 years old and older did not experience a heart benefit

WHI (cont.)
- What the FDA says about the WHI study results:
  - Treatment of menopausal symptoms such as hot flashes and vaginal dryness, remains the main use for HT and ET
  - HT and ET should be used at the lowest effective dose for the shortest time period
  - HT should not be used for primary or secondary prevention of coronary heart disease (CHD)
  - Current GYN exam, pap test, mammogram

WHI (cont.)
- Women who are using or considering HT or ET should consult with their health care professional
- Implications for nurse practitioners:
  - Age of patient
  - Age at menopause
  - Patient history of breast cancer, stroke, CAD, blood clots
  - Strong Family history of breast cancer, stroke, CAD, blood clots

North American Menopause Society (NAMS)
- Most recent statement July, 2008
- Terms ET and EPT changed to “menopausal hormone therapy” (HT)
- Women most likely to benefit from HT = around the time of menopause (preferably before age 60)
- Benefit of HT decreases with advancing age and increasing time since menopause

North American Menopause Society (NAMS)
- Decreased risk of CHD in women starting HT within 10 years of menopause
- Increased risk when starting HT more than 10 years beyond menopause
- Diagnosis of breast cancer increases with EPT use beyond 3 to 5 years
- No increased risk in breast cancer after an average of 7.1 years of ET use

Treatment Options
- WHAT ARE THE CHOICES?
  - Nothing
  - Low dose hormones (EPT vs. ET)
    - oral
    - Transdermal (decreases risk of DVTs)
    - Intravaginal creams
    - Femring, estring, vagifem tablets
  - Bioidentical Hormones
  - SNRIs (Effexor, Pristiq)
  - Alternative methods
Pharmaceutical Therapies

Many Options for Hormone Therapy

Low Dose Hormones

- HT is the most effective medication for treating menopause symptoms:
  - Hot flashes/night sweats
  - Atrophic vulvovaginitis
  - Lowest dose for shortest period
  - Measurement of levels before treatment (serum vs. saliva)
  - What was patient’s level before menopause

Bioidentical Hormones

- Derived from a plant oil (diosgenin)
  - Similar to human cholesterol (human exogenous precursor steroid hormone)
  - Extracted from wild yams and soy
  - Chemically altered in lab to exactly match human steroids
  - Allergenicity to yams is removed in the process

Bioidentical Hormones

- Estrogen
  - Triest [Estriol 80%, Estradiol 10%, Estrone 10%]
  - Biest [Estriol 80%, Estradiol 20%]
  - 0.5 – 2.25 mg b.i.d.
- Progesterone 50 – 200mg, qhs
- Testosterone 1.0mg qam

SNRIs

- Decreases norepinephrine
- Effexor XR (venlafaxine)
  - Begin with 37.5 mg daily
  - May go as high as 225mg/day
  - Pristiq (desvenlafaxine)
- Side effects:
  - Weight gain
  - Decreased libido
    - Wellbutrin (buproprion) 1 – 2 hours before sex

All Menopausal Women

- Healthy Lifestyle
- Regular Exercise
- Proper Nutrition
  - Calcium Supplements 1200-1500 mg /day with Vitamin D
  - Enteric Coated Baby Aspirin
- Smoking Cessation
- Limit alcohol intake
Non Pharmacological Treatment

- Do nothing
- Paced respirations (decreases norepinephrine)
- Inhale slowly and deeply 5–7x/minute
- Yoga/Meditation (decreases norepinephrine)

Diet
- Add dietary soy/phytoestrogens
- tofu, soy nuts, edamame
- Be cautious with soy supplements
- Do not use in women with an estrogen dependent tumor
- Decrease saturated fat intake (they constrict arteries)

Acupuncture

Alternative Methods

- Vitamin E (400 I.U/day)
- Black Cohash
- Remefemin = pharmaceutical grade
- Works within 2 weeks if it is going to work
- Ok to use for woman with breast cancer
- Estroven
- Don Quai
- Evening primrose oil
- Lowers seizure threshold
- Avlimil/Libidol
- Zestra
- Horny Goat Weed

Warning: When I am an Old Woman I Shall Wear Purple By Jenny Joseph

"When I am an old woman, I shall wear purple with a red hat that doesn’t go, and doesn’t suit me. And I shall spend my pension on brandy and summer gloves and satin candles, and say we’ve no money for butter. I shall sit down on the pavement when I am tired and gobble up samples in shops and press alarm bells and run my stick along the public railings and make up for the sobriety of my youth. I shall go out in my slippers in the rain and pick the flowers in other people’s gardens and learn to spit.

You can wear terrible shirts and grow more fat and eat three pounds of sausages at a go or only bread and pickles for a week and hoard pens and pencils and beer nuts and things in boxes. But now we must have clothes that keep us dry and pay our rent and not swear in the street and set a good example for the children. We must have friends to dinner and read the papers. But maybe I ought to practice a little now? So people who know me are not too shocked and surprised When suddenly I am old, and start to wear purple."