

Primary Health Care Initiatives (PHCI) Project
Contract No. 278-C-00-99-00059-00
Abt. Associates Inc.

MENOPAUSE

LEARNING OBJECTIVES:

- Diagnosis of menopausal signs and symptoms
- Understand the risks and burden of long term effects of estrogen deficiency
- Appropriate management of estrogen replacement therapy
- Communicate to patients necessary messages in understanding, prevention and control of osteoporosis and coronary heart disease

TEACHING STRATEGIES:

- Review of proper history taking in the menopausal woman, including present symptoms, medical and family history.
- Use lecture presentation for didactic material and large group discussion for counseling the patient and weighing the benefits and risks of hormonal replacement therapy.

MATERIALS AND EQUIPMENT NEEDED:

- White board for summarizing major points
- Overhead projector and transparencies
- Different packs of hormonal replacement therapy for demonstration

LEARNING POINTS:

- Definitions related to menopause
 - Menopause – point of permanent cessation of menstrual activity
 - Perimenopause – indefinite period of declining and fluctuating estrogen levels preceding the menopause
 - Postmenopause – period of time from cessation of menstrual activity to end of life
- Initial signs and symptoms of menopause – short-term estrogen deficiency
 - Hot flashes
 - Sleep disturbances
 - Depression
 - Sexual dysfunction and dyspareunia
 - Urinary incontinence and increased incidence of urinary tract infection
 - Vaginal irritation and dryness (atrophic vaginitis)
 - Skin changes
- Long term effects of estrogen deficiency
 - Osteoporosis (relative loss of calcium from bone)
 - Increased risk of cardiovascular disease
 - Perhaps a slight increased risk of Alzheimer's disease
- Benefits of hormonal replacement therapy
 - Decrease in vasomotor symptoms of hot flashes

- Protective effect of progesterone on endometrial cancer
 - Prevention of calcium and bone loss and decreased osteoporosis
 - Prevention of cardiovascular disease
 - Relief of urinary and genital tract symptoms
- Risks of hormonal replacement therapy
 - Endometrial cancer, if only estrogen used without progesterone
 - Thromboembolism – slight increase in coagulability of blood
 - Perhaps slight increase in risk of certain breast cancers (this is still debated)
 - May cause some sodium and fluid retention, and hypertension in some individuals
 - Can cause enlargement of fibroid tumors of uterus
- Management of menopausal symptoms
 - Confirm menopause (presence of typical symptoms, no menstruation for at least 4-6 months, FSH level > 35)
 - Goal of treatment – restoration of normal function, and decrease in risk factors of aging
 - Begin with lifestyle modification and improvement:
 - Regular, aerobic exercise – 30 minutes daily
 - Balanced diet with adequate fruits and vegetables
 - Begin calcium supplementation (milk and yoghurt daily, calcium 1gm. Daily)
 - Weight loss if BMI > 30
 - Stress reduction
 - Stop smoking
 - Estrogen replacement therapy
 - Confirm absence of contraindications to estrogen therapy:
 - a. Estrogen dependent breast cancer
 - b. Undiagnosed vaginal bleeding
 - c. Uterine or ovarian cancer
 - d. Large fibroid tumors of uterus
 - e. History of thrombophlebitis or thromboembolism
 - f. Severe hypertension
 - g. Severe heart disease with cardiac failure
 - Estrogen alone – used only in women after hysterectomy (0.625 – 1.25 mg/day conjugated estrogens)
 - Estrogen with cyclic progesterone
 - a. Used in women who want or do not object to cyclic vaginal bleeding
 - b. Cyclic regimen - 0.625 – 1.25 mg/day conjugated estrogens on day 1 – 25, with medroxyprogesterone 10 mg/day on day 15 - 25 each month, and no medication day 26 – 30. Some vaginal bleeding usually occurs day 26 – 31.
 - c. Alternative cyclic regimen - 0.625 – 1.25 mg/day conjugated estrogens on day 1 – 30, with medroxyprogesterone 10 mg/day on day 1 –12 each month
 - Combined estrogen and progesterone
 - a. May result in some irregular vaginal bleeding for the first 1-3 months, but then bleeding stops

- b. Advantage is that woman can develop habit of taking the same two pills each day
- c. Combined regimen - 0.625 – 1.25 mg/day conjugated estrogens and medroxyprogesterone 2.5 mg daily on continuous basis
- Monitoring of estrogen replacement therapy
 - o Woman should be evaluated at 2-3 months after beginning therapy, and every year after
 - o Followup should focus on following elements:
 - a. Improvement in menopausal symptoms and restoration of function
 - b. Absence of vaginal bleeding
 - c. Monitor blood pressure and edema
 - d. Breast examination and mammogram
 - e. Continued patient education regarding menopause and need for life-style changes
- Androgens – may be occasionally added to estrogen replacement to increase libido in women who complain of decreased sexual interest
- Non hormonal medication – occasionally used to help control hot flashes in women who cannot take estrogen replacement – usually a combination of an ergot preparation and anti-spasmodic. Large amounts of soy protein may also give some benefit in symptoms

CASE STUDY

Name of patient	Fatemah
Sex	Female
Date of Birth	24 September 1954
Date of visit	5 April 2000

Vital Signs	pulse 82/min
	B/p 120/80
	weight 56 kg
	height 168

Medical History: She is complaining of hot flashes, forgetfulness, sleep disturbances associated with nervousness, in the last three months. Upon questioning, she has regular periods, uses barrier contraception and had her last smear 2 years ago. She has no urinary symptoms.

Physical examination: Abdomen is soft and lax
Pelvic examination revealed nothing abnormal.

Topics of discussion regarding case study:

- What additional elements in the history should be asked?
- What additional elements in the examination should be done?
- What is the appropriate plan of management?
- What counseling issues should be raised with the patient?

CRITICAL ELEMENTS OF COMPETENCE FOR EVALUATION

- Correct identification of estrogen deficiency symptoms

- Knowledge of risks, benefits, and contraindications to hormone replacement therapy
- Appropriate counseling, life style, exercise and possible HRT combinations

PROTOCOL FOR MANAGEMENT:

Initial Assessment

A. Counseling

- Begin by age 45 and review annually
- Assess risk of coronary heart disease (CHD), osteoporosis, breast cancer
- Emphasize diet, lifestyle exercise to reduce risks of coronary artery disease (CAD), osteoporosis
- Distribute written information about menopause and hormonal replacement therapy

B. Clinical exam:

- Blood pressure (BP), weight, height, pelvic exam, breast exam, General health risk assessment

C. Referrals:

- abnormal vaginal bleeding
- for (HRT) guidance with fibroids, endometriosis and persistent symptoms

Hormone Replacement Therapy (HRT)

Contraindications:

- Absolute: undiagnosed bleeding, pregnancy
- Relative: personal history of breast, ovarian, endometrial cancer; fibroid tumors of uterus, personal history of phlebitis or thromboembolism, hypertension, symptomatic heart disease

When to initiate HRT:

Symptomatic:

- Depends on severity of symptoms, menopause not firmly established until 6-12 months after cessation of menses.
- If still menstruating: low dose OC if nonsmoker (check FSH q 12 month late in placebo week and begin HRT when FSH > 35).

Asymptomatic patients for prevention:

- 6-12 months after cessation of menses
- Immediately after oophorectomy

Treatment alternatives:

- Treat 1-3 years, then may taper (in patients with relative risk factors for long-term use); or may continue indefinitely (in patients with no relative risk factors to estrogen use)
- Oral hormonal regimens:
 - With uterus:
 - Conjugated estrogen or esterified estrogen 0.625 mg – 1.25 mg. daily with cyclic medroxyprogesterone acetate 10 mg days 1-12
 - Conjugated estrogen 0.625 mg – 1.25 mg. and medroxyprogesterone acetate 2.5 mg QD (best tolerated in women amenorrheic for at least one year)
 - Without uterus:
 - Conjugated or esterified estrogen continuously, 0.625 mg - 1.25 mg. daily.
- Estrogen patches:

- o With uterus: Estradiol patch, 0.05 mg once a week with cyclic or continuous medroxyprogesterone
 - o Without uterus: Estradiol patch 0.05 mg once a week.
- Intravaginal estrogen cream if vaginal dryness is noted, and HRT is refused by patient