
menopause

MENOPAUSE

5 th year lecture of syllabus

Presented by

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Introduction

- Menopause is the end of mensteruation.The word menapause came from the greek word,mens,meaning..monthly and,,pausis,,,,meaning cessation. Menopause is apart of awomen ,s natural aging process when her ovaries produce lower level of the esterogen and progesterone and when she no longer able to become pregnant.

Definition

- Menopause is the permanent cessation of mensteruation at the end of reproductive life due to loss of ovarian follicular activity.

Phases of Menopause

The phase of menopause is usually broken down into four categories:-

Pre-menopause

- The broad definition of pre-menopause is the time prior to menopause. The occurrence of menopause before the age of 40 years,

؛Perimenopause

- APeriod _of women,s life characterized by the physiological changes associated with the end of reproductive capacity and terminating with the completion of menopause also called climacteric., during which women will have endocrinological,biological and clinical features because of decreased oesterogen level.

Manopausal phase

It is the end of mensteruation. The age of menopause ranges between 45-55 years,average age is 52,,,,(some bookes 51).

Incidence

Physiologic menopause:

The normal decline in ovarian function due to aging begins in most women between ages 45 and 55 on average 51 and result in infrequent ovulation,decreased mensterual function and eventually cessation of mensteruation.

Pathological menopause :

The gradual or abrupt cessation of mensteruation before 40 years occur idiopathically in about 5% of women.

Causes of Menopause

- Menopause occurs when the ovaries are totally depleated of eggs and no amount of stimulation from the regulating hormones can force them to work.

Physiological changes

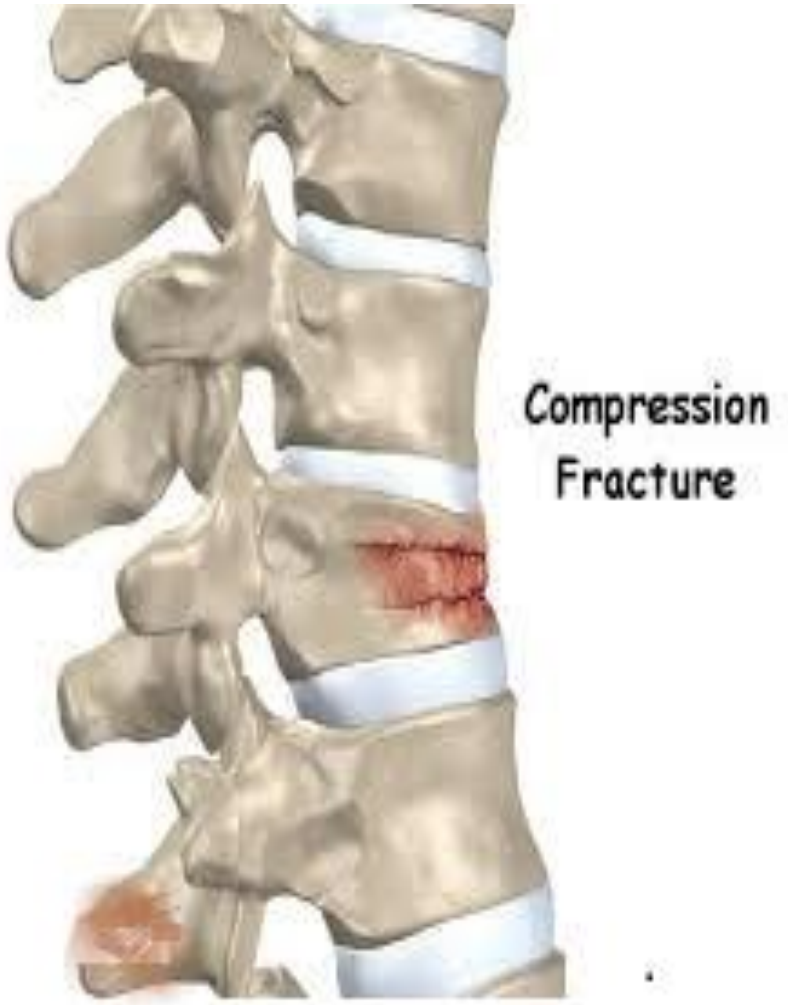
- The lack of esterogen and progesterone causes many changes in women,s physiology that affect their health and wellbeing.The symptoms of menopause due to changes in the metabolism of the body.

1--- Increased cholestrol in the blood

- Hyperlipidemia or an increase in the level of cholestrol and lipids is common,which will cause gradual rise in the risk of heart disease and stroke after menopause.

Osteoporosis

- 2- :Calcium loss from the bone is increased in the first 5 years after the onst of menopause, resulting in aloss of bone density.The cacium moves out of the bones,leaving them weak and liable to fracture at the smallest stress.



Digestive And Urinary systems

- **3-Digestive system**:Motor activity of the entire digestive tract motion is diminished with intestinal sluggishness so these will lead to constipation.

- **4-Urinary system**: As the esterogen level decreasesafter menopause,the tissue lininig the urethra and the bladder becomes drier,thinner and less elastic.This can lead to increased frequency of passing urine as well as an increased tendency to develop UTI.

Changes in the Genital Organs

- **: 1-Uterus: the uterus becomes small and fibrotic due to atrophy of the muscles. The cervix becomes smaller and appears to flush with vagina.**
- **In** Older women the cervix may be impossible to identify seperaetly from vagina. The vaginal and cervical discharge decreases in amount and later disappear completely.

Changes in Genital tracts

- 2-**Ovaries**: The Ovaries become smaller and shriveled in appearance.The Ovaries which produce little androgen during reproductive life begin to produce it in increasing amounts.

- 3- **Vagina: The Vaginal mucous membrane becomes thin and loses its rugosity after menopause.**
- **Deceased secretion make vagina dry.Sexual intercourse become painful and difficult due to pain from the dry vagina.**

Genital Changes

- **__ 4- Vulva or External genital organs:**
- The fat in the labia majora and the mons pubis decreases and pubic hai becom spare.

- 5- **Breast: In thin built women the breast become flat and shriveled while in heavy built women they remain flabby and pendulous.**

Changes in the General Appearance

- ***Skin The skin loses** its elasticity and becomes thin and fine.This is due to the loss of elastin and collagen from the skin.

- ***** **Weight** weight increases is more likely to be the result of irregular food habit due to mood swing.There is more deposition of fat around hips,waist and buttocks.

Hair and voice

- **Hair** hair become dry and coarse after menopause.There may be hair loss due to the decreasing level of esterogen.

- Voice become deeper due to thickening of vocal cords.

HOT FLASHES

*** **hot** flashes are incidents where the women in menopaus gets asudden feeling of warmth and flushing that starts in the face and quickly spread all over the neck and upper body.

This” hot flashes ‘’can occure at any time of the day or night.They vary in number from 1 in every one hour to as one in every 15 min.The hot flashes are often associated with profuse sweating.

- **Night sweat** Night sweatare closely related to hot flashes,both usuaally occur simultanously.
- **Sweat ca** n occurany time day or night,they are more common at night,The sweat can be
- **Severe enough to wake up** the women from asound sleep and may make it difficult for her to go back to sleep.The sudden waking up from sleep can cause palpitation and sometimes panic attacks.

SKIN CHANGES

PSYCHOLOGICAL CHANGES

- The psychological changes are mainly ,manifested by frequentheadach,irritability,fatigue ,depression,
- And insomnia,Althoughthese are often said to be due to changes in the hormonal levels,they are more likely to be related to the loss of sleep due tonight sweat.
- Diminished interest in sex may be due to emotional upset or may be secondary to painful intercourse due to adry vagina.

Social changes during menopause

- The feeling that awomen holds about herself and her social relationship as well as the symptoms she experinced can be defined by the culture in which she live.Women vary in there subjective experiences of symptoms.Not all women,s perceive changes in the body are reflected in the mirror:some are derived from her perception of herself based on the account of other expectation vary and are adjusted to actual experience.

Investigation

-Do not routinly measure FSH level for diagnosing the menopause.The diagnosis is clinical.

-Measurment of LH,Esterogen,progesterone,or toestesterone, are of no value.

- An increased concentration is suggestive of ovarian failure but not indicate an ability to concieve.

_measurement of FSH may be useful in >or =2 occasions at least 1-2 months apart.

Investigation

When FSH is of value?????.

-women <45 y age wth suspected Premaure ovarian failure,,POF-

-in women with -_hysterectomy with conserved ovary before 40 y, of age.

_women using hormonal contraception.meaure after 6 wks of terminating therapy.

Other investigation for menopause is not routinly recommended.unless:

-change in mensterual pattern,IMB,PCB,PMB,=endometrial assessment is needed.

treatment

A-Non- Hormonal methods

Both natural and medical can alleviate the symptomes.

Dressing in light layers can alleviate the hot flashes *night sweat..avoids caffeine,alcohol and spisy* foods can minimizes these symptomes.

Weight changes with menopause tend to go together with life style changes(retirement) due to hormonal changes. Reducing dietry fat intake and regular exercises help to combat weight gain.

NON HORMONAL

- Menopause causes osteoporosis,calcium, magnesium and vitamine D can help restoring bone density,which naturally deterurate after the age of 30 due to reduce esterogen level.
- Vaginal dryness can be treated with kegal
- Exercises help restore elasticity,
- Using water based
- libricantscan hepl during intercourse.

Menopause often lead to dry,itchy and weak thin hair that breaks with splitends, flaxseed

Oil found in (poultry,dairy,red meat,and whole grains) can help restore healthy skin and hair

Hormone replacement Therapy

Called B-as HRT,is indicated to overcome short and long term consequences of menopause

.It can be used before,during or after the menopause.

They can be given

--orally in pill form.

--vaginally(as cream)

--transdermal route(patch)

Indications for HRT

1-Relief of menopausal symptome

2-Prevention of osteoporosis,

3-to maiintain quality of life .

Special groups as-

---premature ovarian failure.

----gonadal dysgenesis.

----surgical or radiation menopause

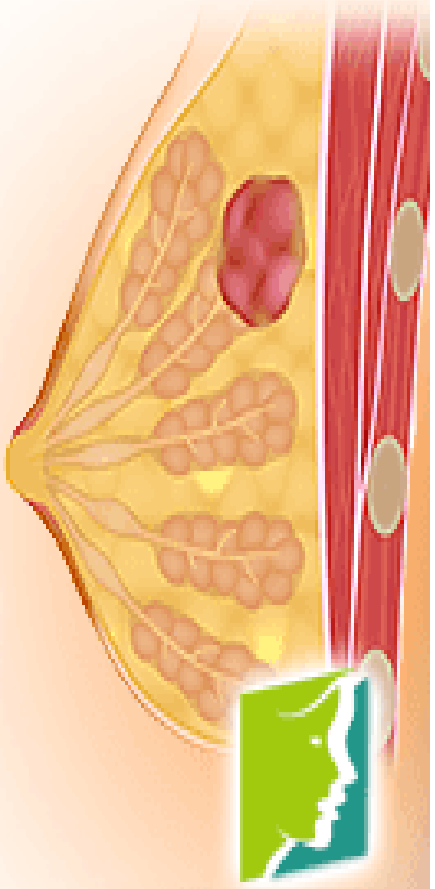
Is HRT the Right Treatment for Menopause Symptoms?

Benefits

- It is effective
- It may help prevent osteoporosis
- It comes in many different forms

Risks

- Heart disease
- Stroke
- Mental decline
- Breast cancer
- Ovarian cancer



Types of HRT

1-Esterogen and **progesterone the most commonly used preperation for women who have auterus.**

D uring therapy Esterogen is given regularly while progesterone is addedon asupplementary bases.for anothor phase inthe last 12-14 days .**The both hormones given together to prevent**

Overgroth of endometrial lining.

Esterogen if given alone may intiate this and leads to endometrial hyperplasia.

HRT

- 2- Esterogen only,,,,this therapy is given to women who have lost their uterus due to surgical menopause.
- No need for progesterone in these women.

- 3- Progesterone only,,,not very often prescribed.

HRT

- Commonly used esterogen are conjugated esterogen(0.625-1.25mg /day),progesterone

  Medroxy progesterone (100-300mg/day).Considering the risks,hormonal therapy should be used with the lowest effective dose and for ashort period of time. Low dose of oral conjug.esterogen 0.3 mg daily is effective and has got minimal side effects.

FORMS OF HRT

Routes and Regimens of HRT

1-Oesterogen:transdermal(gel or patch)mand subcutaneous implantsmthis to avoids first pass effect of liver.

2-progesterone,,vaginal route,e.g.levanogesterel ius,progesteronegel and pessaries,

Progest.available in oral micronized form,vaginal pessaries and gel.

3-contiuous combined regimens,s.t with low dose or what called ultralow dose,

4-low dose vaginal oesterogen creams ,,rings tablets,, and pessaries.

These local oesterogen can be used together with oral or transdermal,,indefintly should be used . No need for progesterone,.

Regimens of HRT

- 5-drospirenone,aspironolactone analouge,has anti androgenic and antimineralocorticoid properties,can be used in low dose continuous preperation.
- With both cyclical and contiuous regimens there may be erratic bleedind to begin with but 90% will eventually bleeds free (stopped)

Immediate Effects of HRT

1-vasomotor symptomes,,,mood and depressive symptoms mostly improved in menopausal transition and early menopause. If not especially in severe cases they need psychatric assessment.

- 2- sexual function,HRT,systemic or topical may improve the sexual function.,testesterone improve the desire and desire.
- 3-urogenital symptomes offrequency,urgency,recurrent UTI,may be relieved by low dose topical esterogen which may be used for long term bases,

IMMEDIATE EFFECTS OF HRT

- 4-musculoskeletal effects,oesterogen has aprotective effect on connective tissue
- 5-HRT had aprotective effects against colorectal carcinoma especially the oral continuous ones but not proved with transdermal route.
- .

Long term EFFECTS of HRT

1-Osteoporosis

HRT is the first choice

For prevention and treatment of osteoporosis in postmenopausal women and those with POI below 60 y,it is dose related,and it decline after it is discontinued,

2-Cardiovascular.

HRt, reduces the incidence of coronary heart disease

By about 50% if started with in 10 years of menopause this called ,,,,window of opportunity.

HRT

3-cognition

- -studies can not documented surely that HRT improve in cognitive function nor it reduce the risk of Alzheimer,s disease and all causes of dementia
- - Do not initiate HRT for the purpose of improving cognitive function or reduce the risk of dementia in post menopausal women.

Alternative To HRT

lifestyle measures:

- Aerobic exercise,as yoga ,sustained aerobic exercise as swimming or running.

*Hot flushes and night sweat,,,

-Had lighter clothes.

-sleep in acooler room.,reduce stress.

-avoide spicy foods ,caffeine,smoking and alcohol.

*sleep disturbances,

*Cognitive symptomes,exercise and good sleep improves cognitive function.

Other therapy

- Non pharmacologic
- * Lubricants and vaginal moisturizers.
- *Diet and supplement as Vit E and VIT C and selenium.
- 800IU /day vit E decreases the frequency of hot flushes.
- *Homeotherapy
- *Setllate gangelion blockade.

Pharmacologic alternatives

- 1-progesterons.
- 2-clonidine.centrally alpha agonist,oral or transdermal.
- 3-selective serotonine and noradrenaline reuptake inhibitor.
- 4-beta blockers,Gabapentine,
- DHESS.

Complementary therapy

*phyto-osterogen-soy and red clover.

*Isoflavenes.found soybeans,chickpea, Red clover,other lequmes(beans and pea)may help to reduce hot flushes.

*black cohosh

*Evening primerose oil -

*Ginseng.

*Chinese herbs.

*reflxology..

*Acupuncture.

*Magnestism.bracelets and insole

*hypnotherapy.


Thank You