



SNS COLLEGE OF NURSING
Saravanam Patti (po), Coimbatore.

DEPARTMENT OF NURSING

COURSE NAME : B.Sc. (Nursing) III Year.

SUBJECT : MEDICAL SURGICAL NURSING II

UNIT : IV-FEMALE REPRODUCTIVE SYSTEM DISORDERS

AND ITS MANAGEMENT

TOPIC : MENOPAUSE



MENOPAUSE



MEANING OF MENOPAUSE

- The transition from reproductive to non- reproductive .
- The word "menopause" literally means the "end of monthly cycles" from the Greek word *pausis* (cessation) and the root *men-* (month).
- Menopause is an unavoidable change that every woman will experience.
- The date of menopause in females is medically defined as the time of the last menstrual period.



INTRODUCTION

- Menopause is the end of menstruation .
- Menopause is a part of a women's natural ageing process when her ovaries produce lower level of the estrogen and progesterone and when she no longer able to become pregnant .



DEFINITION

▶ Menopause means permanent cessation of menstruation at the end of reproductive life due to loss of ovarian follicular activity. It is the point of time when last and final menstruation occurs.

OR

▶ □ **Menopause** is the permanent cessation of the primary functions of the human ovaries.



AGE OF MENOPAUSE

- ▶ Age at which menopause occurs is genetically predetermined and not related to age of menarche or age at last pregnancy, lactation, use of oral pill, socioeconomic condition, race, height or weight.
- ▶ In India and the Philippines, the median age of natural menopause is considerably earlier, at 44 years.



AGE OF MENOPAUSE

- Cigarette smoking and severe malnutrition may cause early menopause.
 - The age of menopause 45-55 years
 - Average 50
- Additional factor:**
- Surgical menopause/ Artificial menopause



PHASES OF MENOPAUSE

➤ It has 4 phases :-

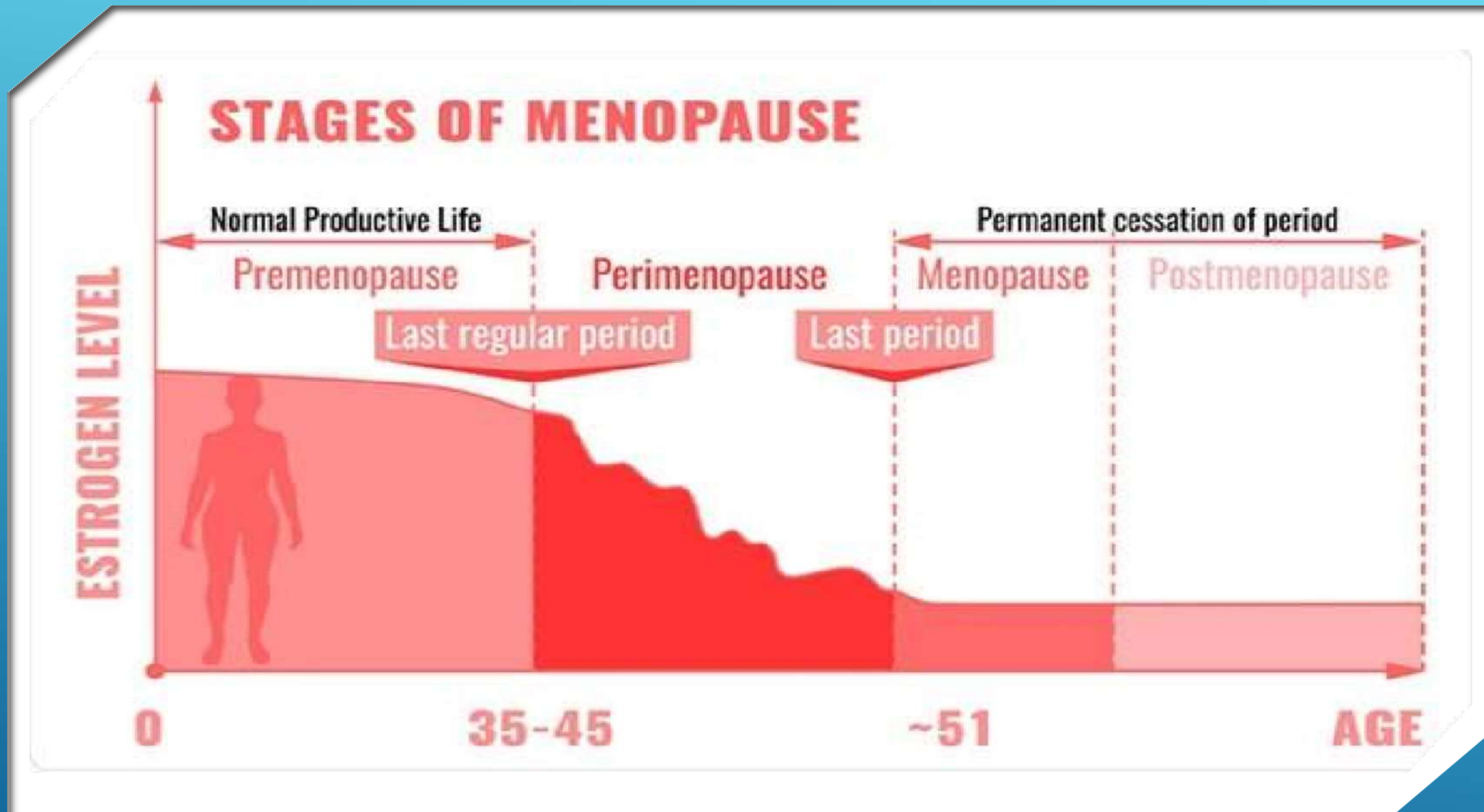
- **Pre- Menopause :-** Pre-menopause is broadly defined as the entire woman's life before menopause. During this phase, a woman will have regular periods, can bear children and the sex hormones like estrogen and progesterone retain a steady balance.



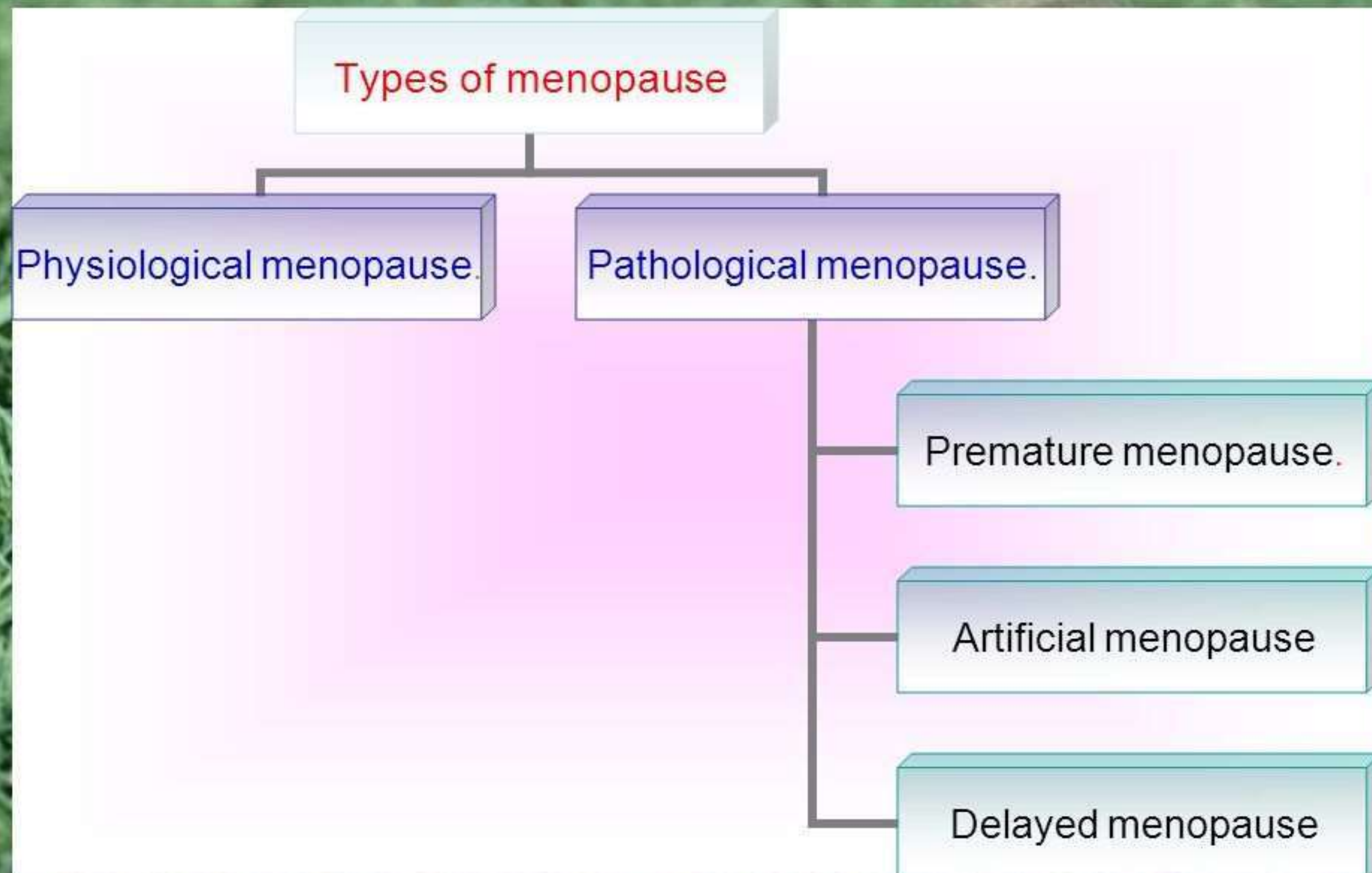
- **Peri- Menopause :-** Perimenopause can begin 8-10 years prior to menopause with the ovaries gradually producing less oestrogen.
- Generally starting in the 40's, it lasts until menopause. The drop in oestrogen increases with women experiencing many symptoms. There is a possibility of women getting pregnant if they still experience the menstrual cycle.



- **Menopausal phase :-** It is the end of menstruation. The age of menopause ranges between 45-55 years . Menopause refers to a specific period, and that is the last period. Once a woman has gone through a period of 12 consecutive months without experiencing a menstrual cycle is called **Menopause**. The ovaries stop releasing eggs.
- **Post menopausal :-** It is the time after which a women has experienced 12 consecutive month of amenorrhea.



Types of menopause





TYPES OF MENOPAUSE

There are several types of menopause and each depends on the cause and/or timing of the end of menstruation.

- **Natural Menopause (Physiological)**
- **Pathological - Premature or Early Menopause**
- **Surgical or Induced Menopause**
- **Delayed menopause**



- **Physiologic menopause:**

- ▶ The normal decline in ovarian function due to ageing, begins in most women between ages 45 and 55 on average 51 and result in infrequent ovulation, decreased menstrual function and eventually cessation of menstruation.

- **Pathologic menopause :**

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



ABNORMAL MENOPAUSE

- **Premature menopause** : A woman's ovaries stop working at a very early age, ranging anywhere from the age of puberty to age 40, and this is known as premature ovarian failure (POF).
- **Delayed menopause** : if the menopause fail to occur even beyond 55 years it is called delayed.



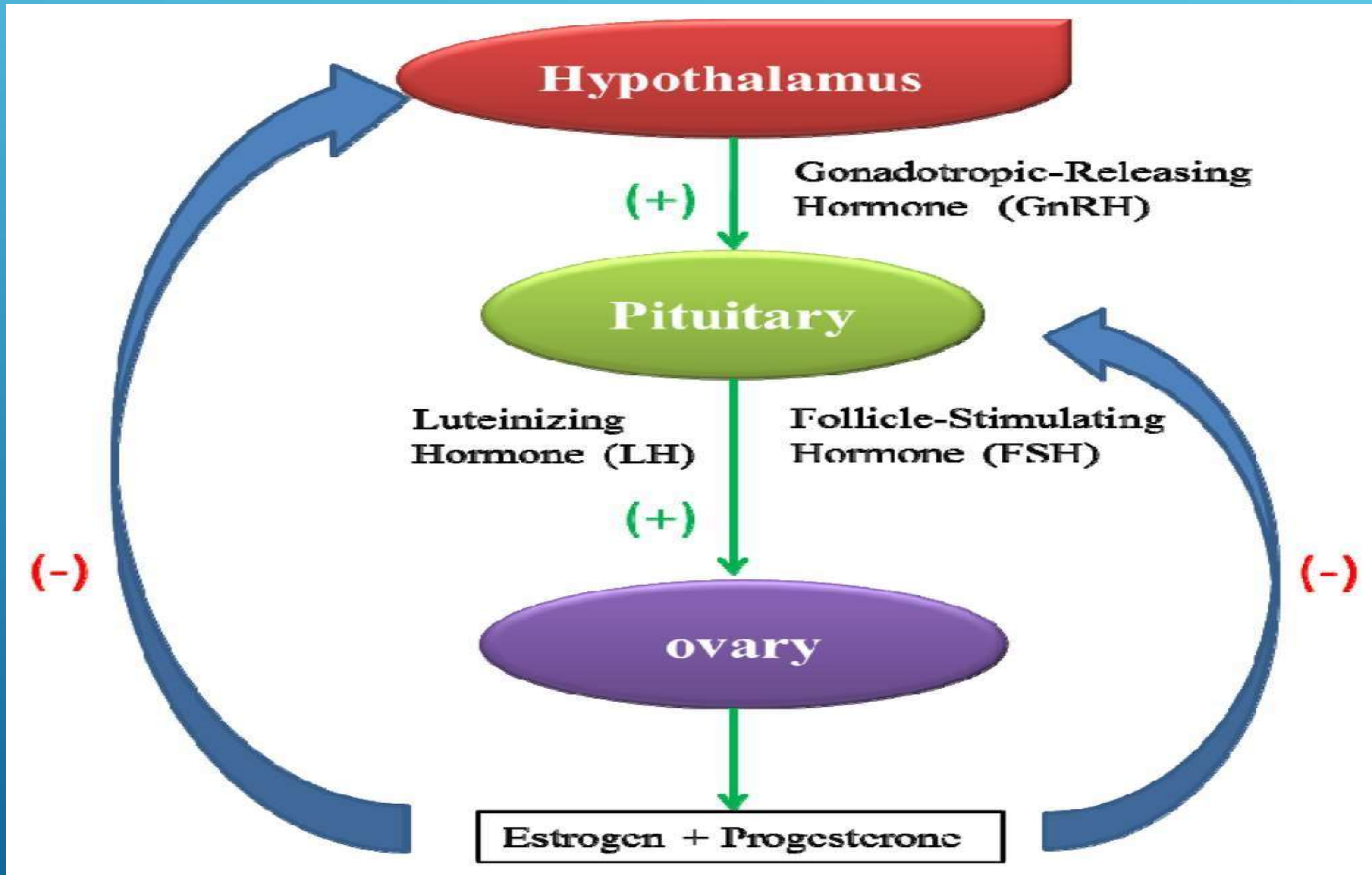
CAUSES OF MENOPAUSE

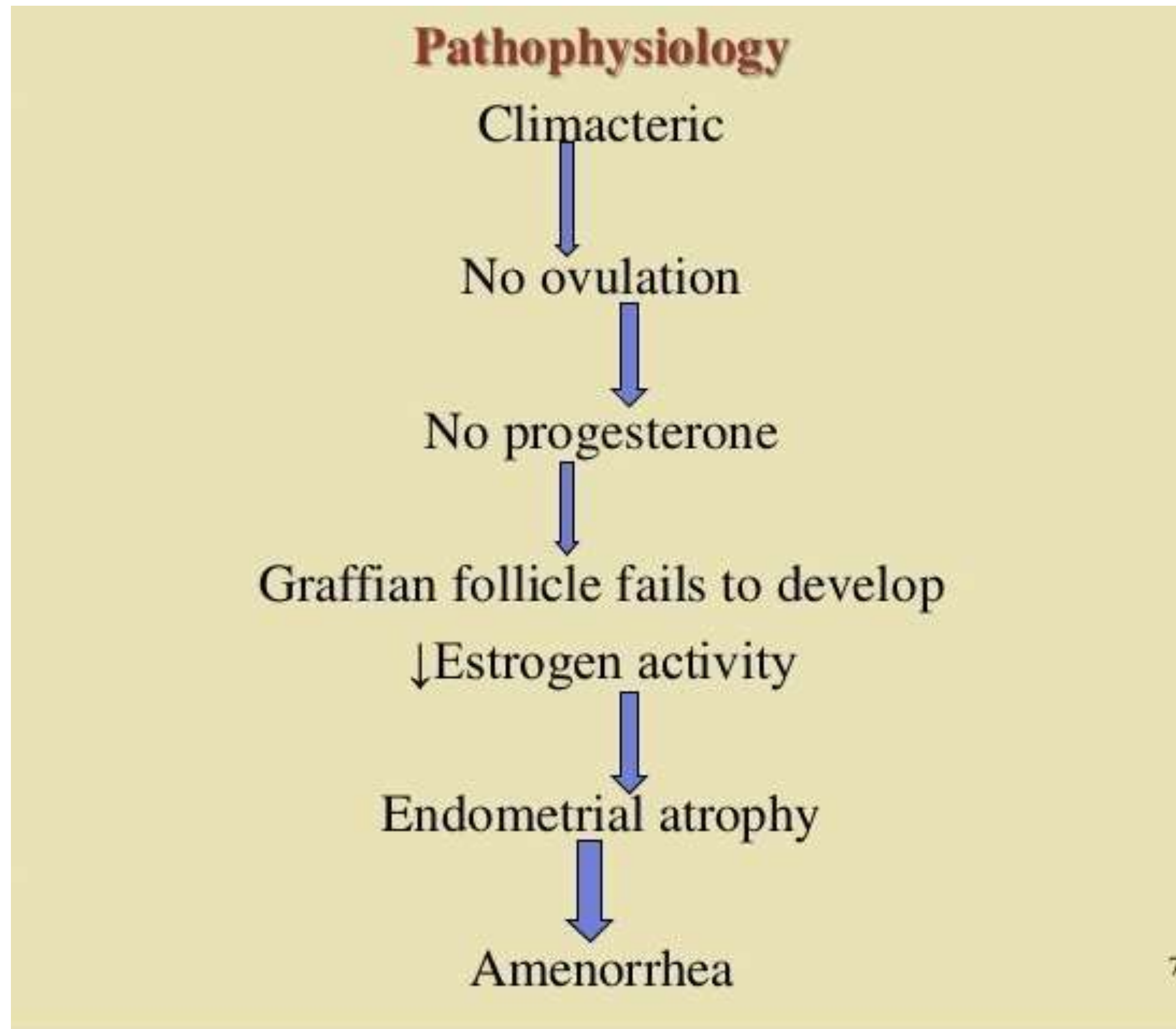
- Menopause occurs when the ovaries are totally depleted of eggs and no amount of stimulation from the regulating hormones can force them to work.
- Natural decline of reproductive hormone.



OTHER ETIOLOGICAL FACTORS

- **Hysterectomy**
- **Chemotherapy and radiation therapy**
- **Primary ovarian insufficiency**
- **Removal of the ovary**







PHYSIOLOGICAL CHANGES



The lack of estrogen and progesterone causes many changes in women's physiology that affect their health and well-being . The symptoms of menopause due to changes in the metabolism of the body.

- **Increased cholesterol level in the blood:**

Hyperlipidemia or an increase in the level of cholesterol and lipids in the blood is common. This lead to gradual rise in the risk of heart disease and stroke after menopause.



- **Osteoporosis** : Calcium loss from the bone is increased in the first five years after the onset of menopause, resulting in a loss of bone density . The calcium moves out of the bones, leaving them weak and liable to fracture at the smallest stress.



- **Digestive system** : Motor activity of the entire digestive tract is diminished after menopause. The intestine tend to be sluggish resulting in constipation.

- **Urinary system:** As the estrogen level decreases after menopause, the tissue lining the urethra and the bladder become drier, thinner and less elastic .

This can lead to increased frequency of urination as well as an increased tendency to develop UTI.



CHANGES IN THE GENITAL ORGANS

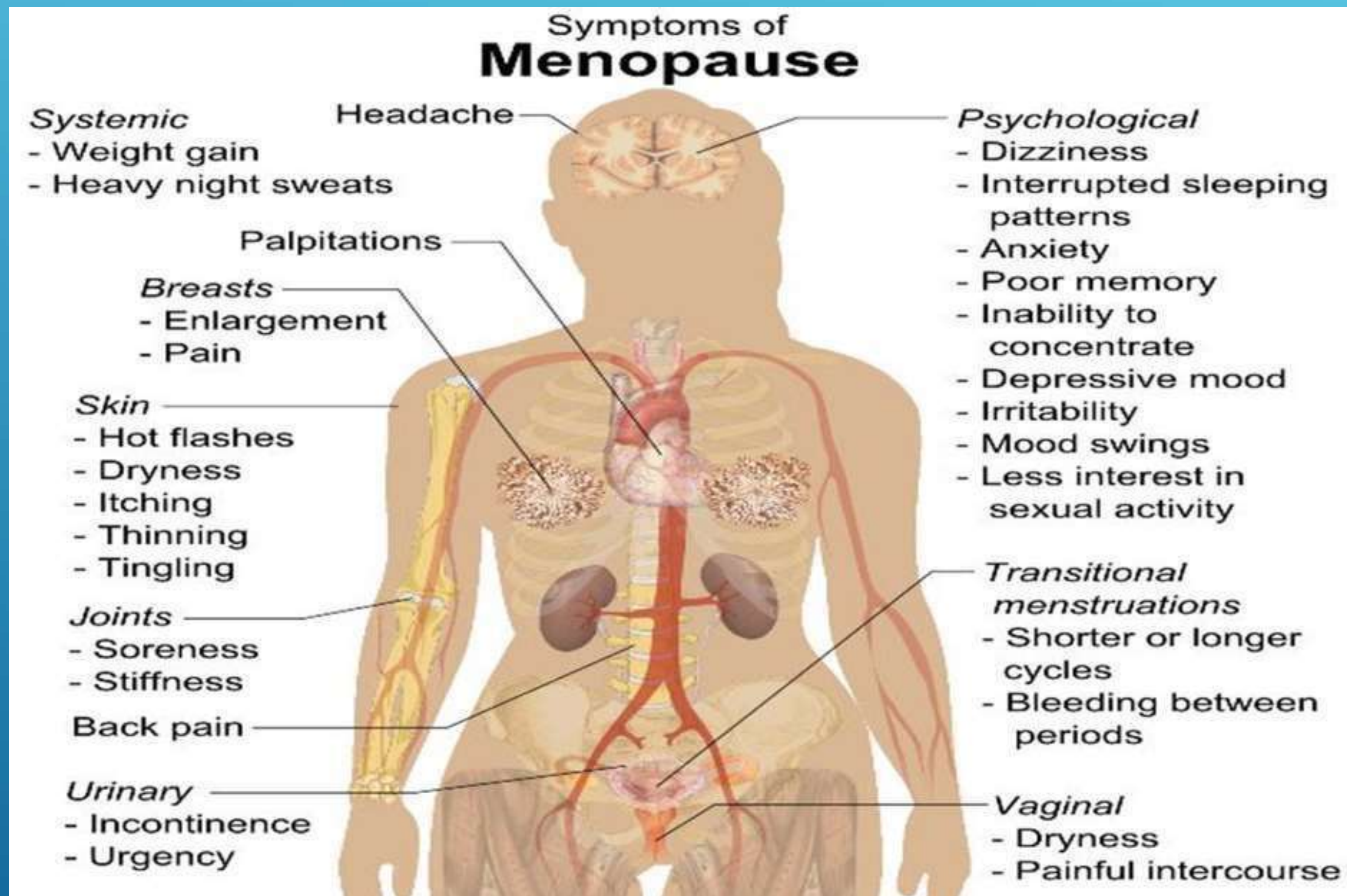
- **Uterus** : The uterus become small and fibrotic due to atrophy of the muscles after the menopause . The cervix become smaller and appears to flush with vagina . In older women the cervix may be impossible to identify separately from vagina . The vaginal and cervical discharge decreases in amount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



- **Ovaries** : The ovaries become smaller and wrinkled in appearance. The ovaries which produce little androgen during reproductive life begin to produce it in increasing amounts.
- **Vagina** : The vaginal mucous membrane becomes thin and loses its rugosity after the menopause. Decreased secretion make vagina dry . Sexual intercourse become painful and difficult due to pain from the dry vagina.



- **Vulva or external genital organs** : The fat in the labia majora and the Mons pubis decreases and pubic hair become sparse.
- **Breast** : In thin built women the breast become flat and wrinkled, 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 increase is more likely to be the result of irregular food habits due to mood swings. There is more deposition of fat around hips, waist and buttocks.



- **Hair** : Hair become dry and coarse after menopause . There may be hair loss due to the decreasing level of estrogen.
- **Voice** : Voice become deeper due to thickening of vocal cords.

- **Hot flashes** : Hot flashes are incidents where the women in menopause gets a sudden feeling of warmth and flushing that starts in the face and quickly spread all over the neck and upper body .



- This 'hot flashes' can occur at any time of the day or night .
- They vary in number from 1 in every one hour to as one in every 15 mints .
- The hot flashes are often associated with profuse sweating.





Night sweats: Night sweats are closely related to hot flashes. Both usually occur simultaneously .

- Sweat can occur any time of the day or night, they are more common at night .
- The sweat can be severe enough to wake up the women from a sound 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.



PSYCHOLOGICAL CHANGES

- The psychological changes are mainly manifested by **frequent headache, irritability, fatigue, depression and insomnia** . Although these 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 to night sweat.
- Diminished interest in sex may be due to emotional upset or may be secondary to painful intercourse due to a dry vagina.

- Depression or unstable mood
- Anxiety
- Fatigue
- Irritability
- Memory loss and problems with concentration
- Mood disturbance : specially mood swing is common.
- Sleep disturbances





- ❑ Insomnia
- ❑ Sleepiness
- ❑ Aggressiveness
- ❑ Tension
- ❑ Phobias
- ❑ Low self-esteem
- ❑ Tearfulness





▮ Causes of mood swing :

1. Hormonal changes
2. Sleeplessness
3. Stress
4. Sexual dysfunction
5. Changes in the body and negative attitude towards aging



DIAGNOSIS OF MENOPAUSE



- ❑ Cessation of menstruation for consecutive 12 months during climacteric period.
- ❑ Appearance of menopausal symptoms 'hot flush' and 'night sweats'.
- ❑ Vaginal cytology – showing menopause index. (features of low oestrogen).
- ❑ Serum oestradiol : $< 20 \text{ pg/ml.}$ (30-400 pg/ml)
one week interval for 3 times)



MANAGEMENT



- **Non hormonal treatment**
 - ✓ Life style modification
 - ✓ Nutriticious diet
 - ✓ Supplementary calcium
 - ✓ Exercise
 - ✓ Vitamin D
 - ✓ Cessation of smoking and alcohol
- **Hormone Replacement Therapy**



NON-HORMONAL TREATMENT



- **There are variety of menopausal treatments both natural and medical that can alleviate the symptoms of menopause:**
- ❖ **Dressing in light layers can alleviate hot flashes and night sweats; avoiding caffeine , alcohol and spicy foods can also minimize these symptoms.**
- ❖ **Menopause and weight gain tend to go together due to life style changes than to the hormonal changes . Reducing dietary fat intake and regular exercise help to combat weight gain during menopause.**



❖ **Menopause can lead to osteoporosis** . Calcium, magnesium and vitamin D can help restore bone density, which naturally deteriorates after age 30 due to reduced estrogen level.

❖ Menopause decreases vaginal elasticity, leading to vaginal dryness . **Vitamin E**(Aquasol E, alpha-tocopherol, and tocopherol.) can help as kegal exercises to restore elasticity . Using water based lubricants during sexual intercourse also minimizes discomfort related to vaginal dryness.



HORMONE REPLACEMENT THERAPY



- Hormone Replacement Therapy(HRT) is indicated in menopausal women to overcome the short-term and long- term consequences of estrogen deficiency.
- HRT can be administered orally (in pill form), vaginally (as a cream), or transdermally (in patch form) because it replaces female hormones produced by the ovaries.
- Hormone replacement therapy minimize menopause symptoms. It can be used before, during and after menopause.



INDICATIONS OF HRT

1. Relief of menopausal symptoms
2. Prevention of osteoporosis
3. To maintain the quality of life in menopausal years.



TYPES OF HRT

Estrogen and progesterone : The most common type of HRT involves both estrogen and progesterone .

- During this therapy, estrogen is given regularly while progesterone is added in on a supplementary basis
- These two hormones are given in combination in order to prevent the overgrowth of uterine lining .
- Estrogen alone may irritate this lining which could lead to endometrial cancer.



- **Estrogen only** : Estrogen therapy alone is usually given to women who have lost their uterus due to surgical menopause . Because no uterus is present , the need for progesterone is not as great.
- **Progestin only**: Progestin-only therapy is not prescribed very often. Progestin does seem to provide excellent relief for women plagued with hot flashes.



AVAILABLE PREPARATIONS FOR HRT



- Commonly used estrogen are **conjugated estrogen** (0.625-1.25 mg/day).
- Progestins used are, **medroxyprogesterone** (100-300mg/day). Considering the risks, hormonal therapy should be used with the lowest effective dose and for a short period of time.
- Low dose of oral conjugated estrogen 0.3 mg daily is effective and has got minimal side effects.



Oral estrogen regime

- estrogen – conjugated estrogen - 0.3 mg or 0.625 mg is given daily for woman who had hysterectomy.
- estrogen and cyclic progestin

For a women with uterus, estrogen is given continuously for 25 days and progestin is added for last 12 -14 days.



- **Sub dermal implants**

Implants are inserted subcutaneously over the anterior abdominal wall using local anaesthesia. **17 β oestradiol implants- 25 mg , 50 mg or 100 mg** are available and can be kept for 6 months.

- **Percutaneous estrogen gel**

1 gm applicator of gel delivering **1 mg of oestradiol** daily is to be applied onto the skin over the anterior abdominal wall or thigh.



- **Transdermal patch**

It contains **3.2 mg of 17 β oestradiol** releasing about **50 μ g of oestradiol in 24 hrs.** It should be applied below the waist line and changed twice a week.

- **Vaginal cream**

Conjugated equine vaginal estrogen cream 1.25 mg daily is very effective specially when associated with atrophic vaginitis .

Women with symptoms of urogenital atrophy and urinary symptoms and do not like to have systemic HRT, are suitable for such treatment.



DURATION OF HRT

- Generally, use of HRT for a short period of 3-5 years have been advised.
- Reduction of dosage should be done as soon as possible.



SURGICAL MENOPAUSE

- Surgical menopause is a type of induced menopause in which both ovaries are surgically removed .
- Surgical menopause can occur at any age before natural menopause occurs .
- The symptoms of surgical menopause are generally **more intense** than when menopause occurs naturally.

HEALTH EDUCATION ON MENOPAUSE

- **Women at the menopausal stage need to be supported emotionally; they may need counselling to be educated about how to manage signs and symptoms of menopause.**
- **This may also help them to overcome the symptoms of anxiety and depression.**
- **Certain life style modification is necessary to prevent the occurrence or minimise the effects of the associated condition.**

Health Education

- ▣ Encouraged regular exercise.
- ▣ Encourage family members to give emotional support to prevent depression.
- ▣ Encouraged to take healthy and balance diet.
- ▣ Encourage to practice relaxation techniques and get enough sleep.

Health Education

- ▣ Instruct to get enough calcium, Vitamin D or minerals and supplements if recommended by the Doctor.
- ▣ Instruct to quit smoking.
- ▣ Instruct to wear light and comfortable clothes.



ASSESSMENT

1. WHAT DO YOU MEAN BY MENO

PAUSE?

2. LIST DOWN THE ETIOLOGICAL



REFERENCES

- LEWIS(2014), TEXT BOOK OF MEDICAL SURGICALNURSING,2ND EDITION,PAGE NO:1359-1360,ELSEVIER PUBLICATIONS
- BRUNNER (2006),10TH EDITION,TEXT BOOK OF MEDICAL SURGICAL NURSNG,PAGE NO:1387-1389, ELSEVIER PUBLICATIONS

THANKYOU.....