



MENOPAUSE

Dr N Muhaidat

Menopause

- Permanent cessation of menstruation resulting from the loss of ovarian follicular activity
- Recognized to have occurred after 12 consecutive months of amenorrhea, for which there is no other obvious pathological or physiological cause
- Occurs with the final menstrual period (FMP) which is known with certainty only in retrospect a year or more after the event.

Perimenopause

- The period immediately prior to the menopause (when the endocrinological, biological, and clinical features of approaching menopause commence) and the first year after menopause.

Menopausal transition

- Period of time before the FMP when variability in the menstrual cycle is usually increased.

Climacteric

- The phase in the aging of women marking the transition from the reproductive phase to the non-reproductive state. This phase incorporates the perimenopause.
- When the climacteric is associated with symptomatology, it may be termed the “climacteric syndrome”.

Postmenopause

- The period dating from the FMP, regardless of whether the menopause was induced or spontaneous.

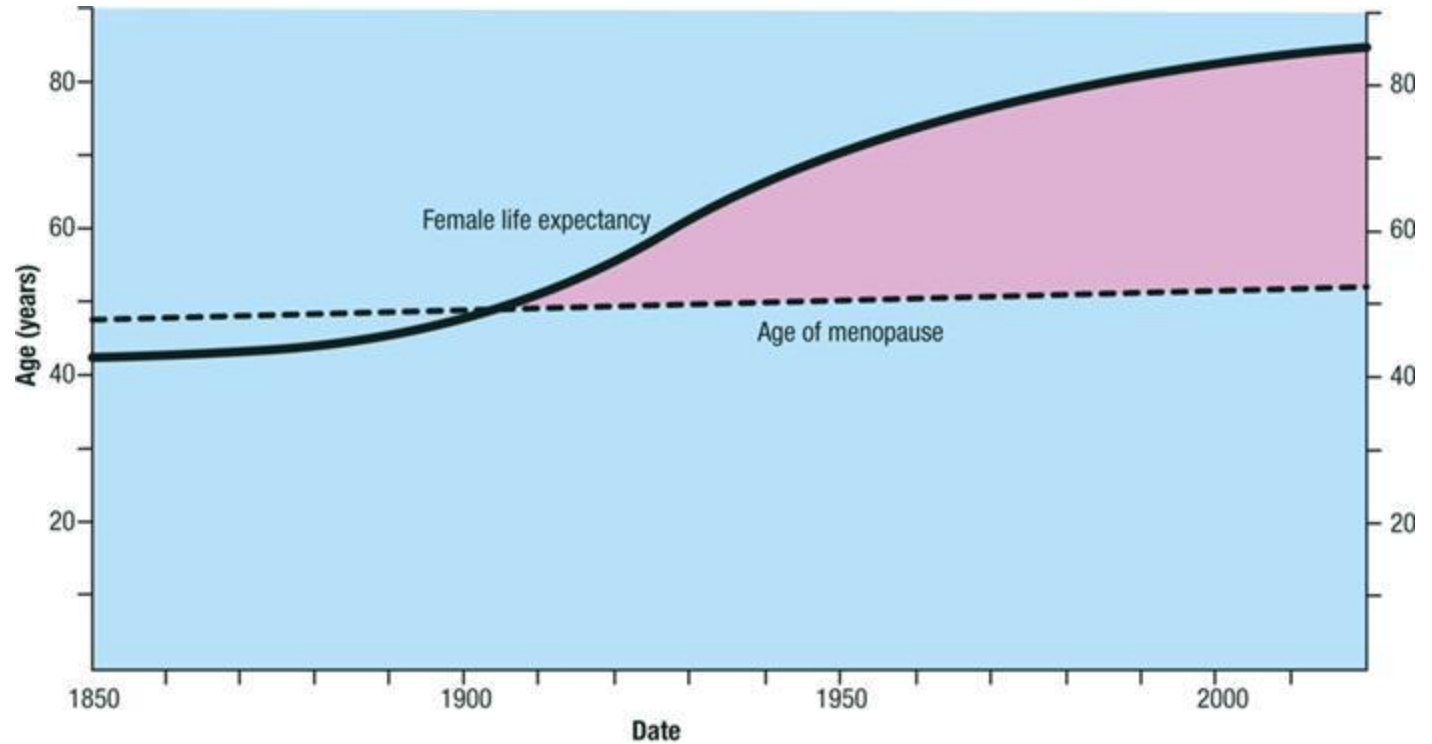
Premature menopause

- ideally, premature menopause should be defined as menopause that occurs at an age less than two standard deviations below the mean established for the reference population.
- In practice, in the absence of reliable estimates of the distribution of age at natural menopause in populations in developing countries, the age of 40 years is frequently used as an arbitrary cut-off point, below which menopause is said to be premature.

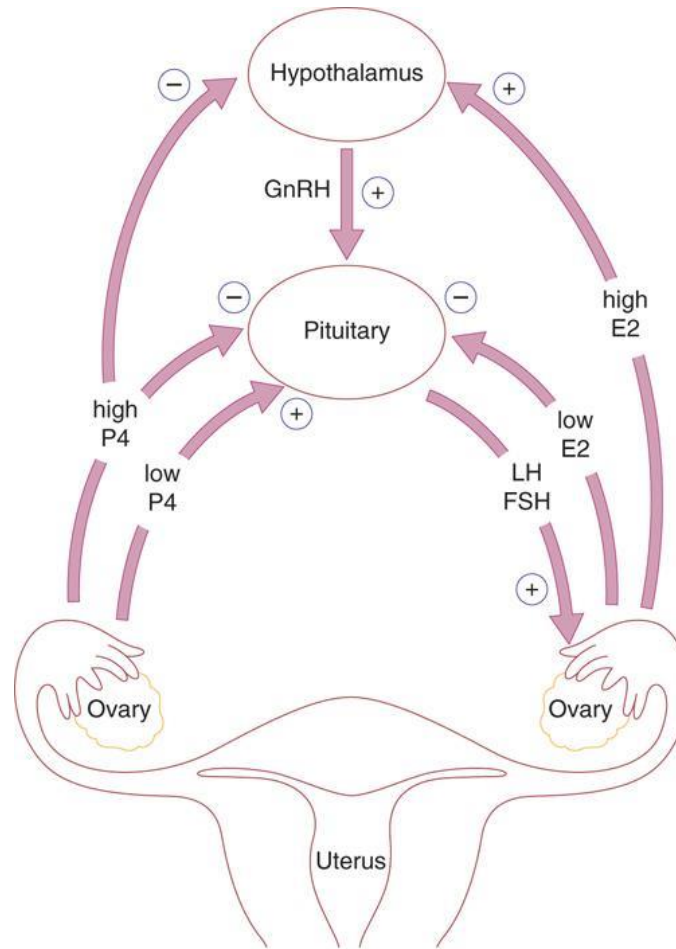
Induced menopause

- the cessation of menstruation which follows either surgical removal of both ovaries (with or without hysterectomy) or iatrogenic ablation of ovarian function (e.g. by chemotherapy or radiation).

Menopause and Life Expectancy



HPO axis



Pathophysiology

- There is a steady decline in the number of oocytes over the course of a woman's reproductive years
- As the ovary ages the remaining follicles are those least sensitive to gonadotrophins, and are less likely to mature, and ovarian function gradually fails.
- Cycles become anovulatory and irregular
- Fertility declines

Pathophysiology

- Fall in ovarian inhibin production
- Fall in ovarian oestradiol levels

Short Term Effects (0-5y)

- Vasomotor symptoms
- Psychological symptoms
- Loss of concentration and poor memory
- Joint aches and pains
- Dry and itchy skins
- Hair changes
- Decreased libido

Intermediate Effects (3-10y)

- Vaginal dryness
- Dyspareunia
- Sensory urgency
- Recurrent UTIs
- Urogenital prolapse

Long Term (> 10y)

- Osteoporosis
- Cardiovascular disease
- Dementia

History

- Symptoms
- Effect on quality of life
- Previous treatments and side effects
- Risk factors for cardiovascular disease, osteoporosis, breast and gynaecological cancers, thrombosis.
- Family history

Physical Examination

- Breast
- Abdomen
- PV
- Cervical smear
- Symptom guided

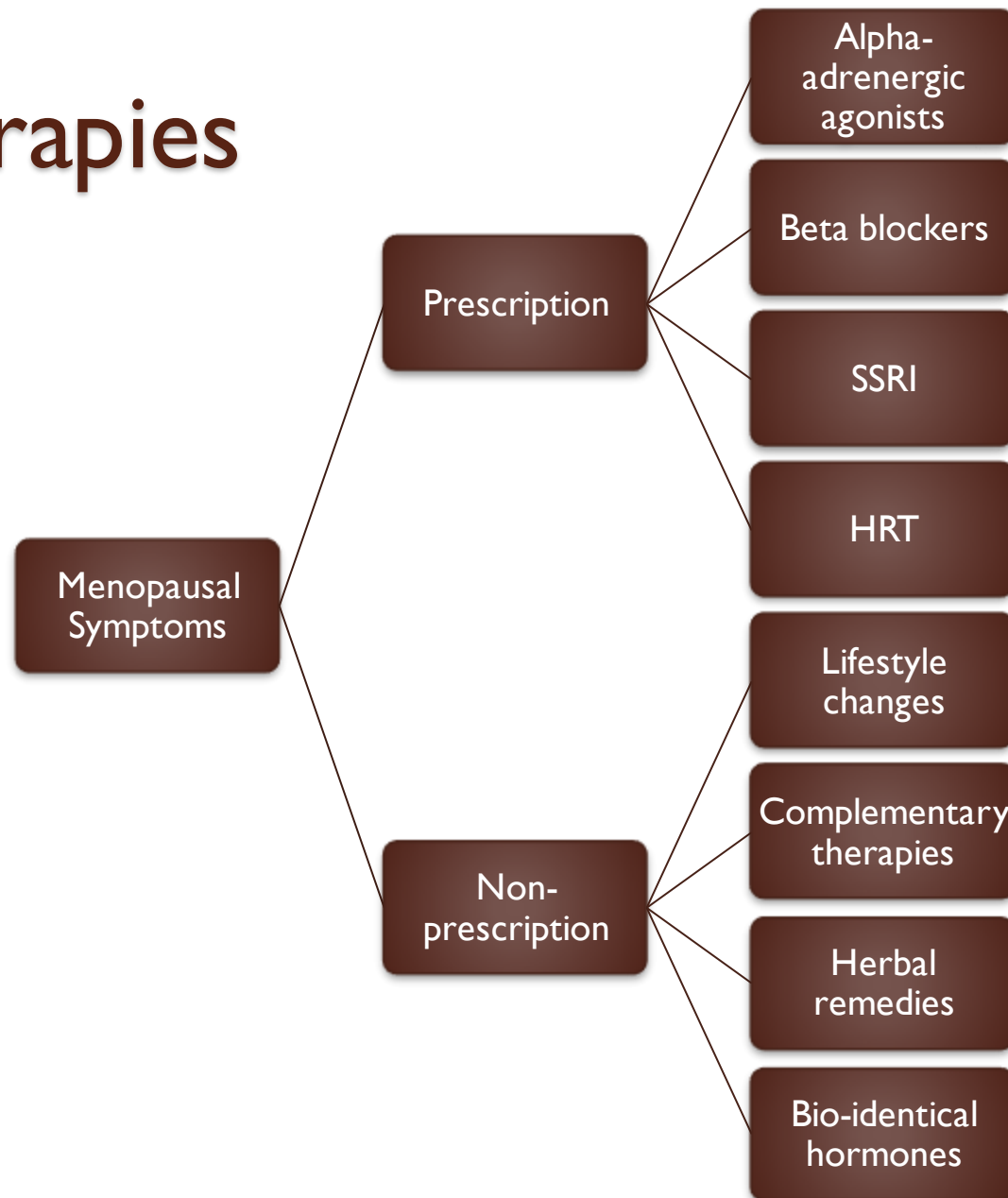
Investigations

- FSH > 30 IU/L, preferably 2 measurements, 2 weeks to 3 months apart.
- Breast screening and mammography
- Endometrial assessment of unscheduled bleeding
- Cardiovascular disease risk assessment
- Skeletal assessment

Management

- May not need any treatment
- HRT and alternatives
- Long term preventative strategies

Therapies



Lifestyle advice

- Smoking cessation
- Diet
- Exercise

HRT

Oestrogen

ALONE
Only for
hysterectomised
women

COMBINED
(PROG)

Routes:

- Oral
- Topical (cream, gel, patches)
- Subcutaneous implants

+/- Testosterone

Regimens

- Cyclical:

Mimicks the natural cycle

Perimenopausal

- Continuous:

No-bleed treatment

Post-menopausal

Benefits

- Vasomotor symptoms
 - Urogenital symptoms
 - Osteoporosis
 - Colon cancer
- } Not indications
for treatment

Risks

- Breast cancer
- VTE
- Endometrial cancer

Controversies

- Cardiovascular disease
- Alzheimer's
- Ovarian cancer

Absolute Contraindications

- Pregnancy
- Breast cancer
- Endometrial cancer
- Active liver disease
- Uncontrolled hypertension
- Known VTE
- Known thrombophilia
- Otosclerosis

Relative Contraindications

- Uninvestigated abnormal bleeding
- Large fibroids
- Past history of benign breast disease
- Family history of VTE
- Chronic stable liver disease
- Migraine with aura

Duration of treatment

- Minimum effective dose for shortest duration
- Average 2-3 years
- In premature menopause at least till age of 50



END