

MENOPAUSE & HRT

Updates and Full Management

Better symptoms • Lower risks • Healthier futures



KEY PRINCIPLE

“It’s not just about giving estrogen - it’s about the right woman, the right therapy, at the right time.”

Individualized care • Informed decisions • Healthier tomorrows

1. THE MENOPAUSE CONCEPT

Menopause: Permanent cessation of menstruation (after 12 months of amenorrhea, with no other cause).

- Average age $\approx$ 51 years

Terminology

Perimenopause

Changing ovarian function

Postmenopause

After menopause

POI

Premature Ovarian Insufficiency - <40 years

Menopause

Final menstrual period (retrospective)

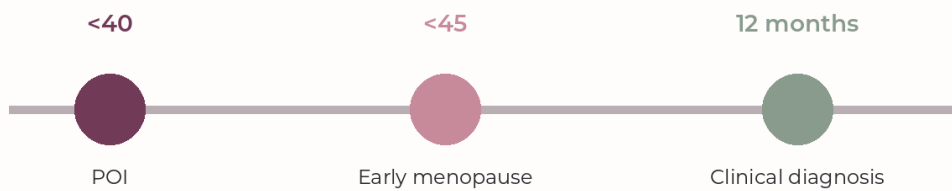
Early menopause

<45 years

Premature menopause

<40 years, often used with POI

Menopause timeline at a glance



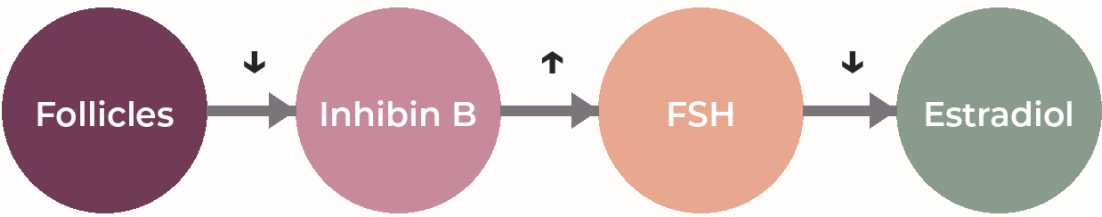
MNEMONIC: "45-40-12"

<45 → Early menopause · <40 → POI · 12 months → Clinical diagnosis

2. WHAT ACTUALLY CHANGES?

The hormonal transition

Changing ovarian function drives fluctuating estrogen before sustained decline



↓ Follicles → ↓ Inhibin B → ↑ FSH → Fluctuating estrogen → ↓ Estradiol

Reproductive

Anovulation • Irregular cycles • Amenorrhea

Neuropsychological

Sleep disturbance • Mood changes • Brain fog / concentration difficulties

Sexual

Reduced libido • Dyspareunia

Vasomotor

Hot flushes • Night sweats

Genitourinary

Vaginal dryness • Dyspareunia • Urinary urgency • Recurrent UTI

Long-term

Bone loss • ↑ cardiovascular risk with aging • Sarcopenia / frailty • Changes in body composition

3. DIAGNOSIS

Clinical diagnosis

For a woman ≥ 45 years with typical symptoms, menopause is generally diagnosed clinically.

DO NOT ROUTINELY ORDER FSH

Especially in perimenopause, because FSH fluctuates.

When to request FSH? “<45 or UNCLEAR”

- 40-45 with symptoms + cycle changes
- <40 when POI is suspected
- Diagnosis is uncertain

Differential diagnosis: “HOT = HAT”

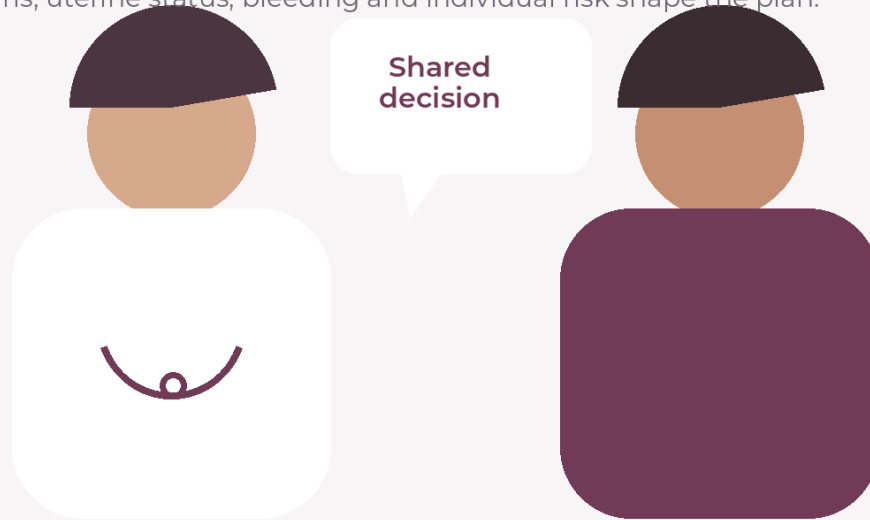
- H - Hyperthyroidism
- A - Anxiety / medication / substances
- T - Transition to menopause

Also: pregnancy, infection, malignancy, thyroid disease, hyperprolactinemia, primary ovarian insufficiency.

4. THE MENOPAUSE CONSULTATION

Menopause care is a consultation, not a prescription.

Symptoms, uterine status, bleeding and individual risk shape the plan.



M - Menstrual history

LMP, cycle pattern, heavy/IM bleeding, postmenopausal bleeding

N - Non-gynecological risks

CVD, VTE, Breast, Bone, Liver

P - Past medical history

VTE, stroke, CAD, migraine, hypertension, diabetes, liver disease

U - Uterus status

Present or absent?

E - Expectations

“What is bothering you most?”

E - Estrogen-deficiency symptoms

Hot flushes, sleep problems, vaginal symptoms, sexual symptoms

O - Obstetric/gynecologic history

Pregnancy, endometriosis, fibroids, endometrial pathology, hysterectomy

A - Actual medications

Anticoagulants, antidepressants, AEDs, Tamoxifen, enzyme inducers

S - Screening

Breast, Cervical, Colorectal, BP, Diabetes/lipids

5. THE BIG HRT DECISION

“TIME - SYMPTOM - UTERUS - RISK - ROUTE”

A compact framework for deciding whether systemic HRT is appropriate and how to choose the regimen.

1. TIME

<60 years or within approximately 10 years of menopause?

2. SYMPTOM

Does she need systemic therapy?

3. UTERUS

Present or absent?

4. RISK

Breast cancer? VTE? Stroke? CAD? Liver disease?

5. ROUTE

Oral or transdermal?

6. WHO IS A GOOD CANDIDATE?

A good candidate generally has:

- Symptomatic, especially vasomotor symptoms
- No contraindication
- Understanding of benefits and risks

HRT is effective for

- Hot flushes
- Night sweats
- Sleep disturbance
- GSM

BONE BENEFIT

HRT reduces menopausal bone loss and fracture risk while it is being used.

7. THE UTERUS QUESTION

Uterus present

Estrogen + Progestogen
Unopposed estrogen → endometrial hyperplasia
→ increased cancer risk.

No uterus

Estrogen only
Exception: Previous endometriosis may require combined therapy.

“E + P if U”

E = Estrogen · P = Progestogen · U = Uterus

8. HRT OPTIONS

Estrogen - Oral

Estradiol · Conjugated estrogens

Estrogen - Transdermal

Patch · Gel · Spray

Progestogen

Micronized progesterone · Dydrogesterone ·
MPA · Norethisterone · LNG

LNG-IUS = Uterus Guard

Endometrial protection · Contraception ·
Allows systemic estrogen

9. ORAL VS TRANSDERMAL

“VTE? → PATCH”

Transdermal estrogen avoids first-pass hepatic metabolism.

Preferred with:

- Obesity
- ↑ VTE risk
- Migraine with aura
- Hypertriglyceridemia
- Some cardiovascular risk profiles

Transdermal estrogen does not eliminate VTE risk.

10. HRT REGIMENS

Sequential / Cyclical

Estrogen continuously · Progestogen part of
cycle · Useful in perimenopause / still bleeding
· Withdrawal bleed

Continuous Combined

Estrogen + progestogen continuously · Usually
for postmenopause · Goal: amenorrhea

11. GSM - STEPWISE

“L-E-S”

L - Lubricant: for intercourse • E - Emollient / moisturizer: for regular symptoms • S - Local estrogen: if persistent/significant

Low-dose vaginal estrogen usually does not require progestogen.

12. NON-HORMONAL OPTIONS

Pharmacological

- SSRIs / SNRIs
- Gabapentin / Pregabalin
- Clonidine - selected cases
- NK3 receptor antagonists - newer

CBT - “Body + Brain”

Helps with hot flashes, sleep, mood and coping strategies.

13. CONTRACEPTION

HRT IS NOT CONTRACEPTION

Perimenopause + HRT → contraception is still required.

Options: LNG-IUS, POP, combined (for selected), others.

14. BREAST CANCER

Risk varies with formulation, Progestogen, Duration, Age, Family history, BMI, Alcohol and other factors.

KEY POINT

Never say: “HRT causes breast cancer.”

15. KEY SPECIAL SITUATIONS

Cardiovascular - "TIMING MATTERS"

<60 years or ≤10 years from menopause → generally a more favorable profile

Migraine

Stable estrogen • Prefer transdermal route

Diabetes

Assess overall risk • Transdermal may be attractive

Liver disease

Avoid oral estrogen if active liver disease

VTE - "VEIN → TRANSDERMAL"

Consider transdermal estrogen when VTE risk factors exist

Hypertension

Controlled hypertension is not automatically a contraindication

Obesity

Increases risk but is not an automatic contraindication

16. ABSOLUTE / MAJOR CONTRAINDICATIONS

"CLOTS - CANCER - LIVER - BLEED"

C - Current/past VTE or thrombophilia • C - Certain estrogen-dependent cancers • L - Significant active liver disease • B - Unexplained vaginal bleeding

Also consider:

- Recent stroke/MI
- Known or suspected pregnancy

Full contraindication assessment should follow applicable clinical guidelines.

17. POSTMENOPAUSAL BLEEDING

“12 months amenorrhea + bleeding = investigate.”

Do NOT simply adjust HRT without investigating unexplained postmenopausal bleeding.

Evaluation may include:

- TVUS
- Endometrial biopsy
- Hysteroscopy

18. ENDOMETRIOSIS & FIBROIDS

Endometriosis

Consider combined therapy • May need combined therapy even after hysterectomy

Fibroids

Not necessarily a contraindication • Monitor bleeding and fibroid growth

19. BONE HEALTH

Long-term health: build the foundations



Strength



Bone



Nutrition



Sleep

“CAL-D-EX”

CAL - Calcium • D - Vitamin D • EX - Exercise

Also: adequate protein, no smoking, less alcohol, fall prevention, DXA based on risk.

HRT prevents bone loss while used, but is not necessarily indefinite therapy.

20. LIFESTYLE PRESCRIPTION

Exercise

Resistance exercise • Weight-bearing exercise
• Aerobic activity

No smoking

Avoid tobacco exposure.

Sleep

Sleep optimization

Nutrition

Protein • Calcium • Vitamin D • Fiber •
Cardiometabolic diet

Alcohol

Moderation

21. SEXUAL HEALTH

Menopause + low libido

Assess: GSM, Dyspareunia, Relationship, Sleep, Mood, Medications, Pain, Body image.

FIRST STEP

Treat GSM first.

Testosterone

Consider only for postmenopausal women with HSDD, using a physiologic female dose, with monitoring and avoiding supraphysiologic levels.

22. MONITORING

Review at 3 months

- Symptoms
- Bleeding
- Side effects
- BP
- Adherence
- Satisfaction

Then annually

Unless earlier review is needed.

DO NOT ROUTINELY CHECK

FSH, Estradiol, Progesterone levels