A CLINICAL MASTER CLASS

Perimenopause & Menopause

Recognizing the transition, guiding patients, and treating with confidence — for primary care.

Skin, Bones, Hearts & Private Parts 2026 · Jessica Bell, PA-C, MSCP, ISSWSH Fellow · GynJess

Disclosures

Financial disclosures

Jessica Bell, PA-C, MSCP, ISSWSH Fellow has no relevant financial relationships with ineligible companies to disclose.

Off-label use

This presentation discusses off-label use of testosterone in women: there is no FDA-approved testosterone product for women, and an FDA-approved male 1% gel is used off-label at ~1/10 the male dose for postmenopausal HSDD.

Off-label uses are identified as such where they appear.

What you'll leave able to do

1. **Define the transition** Understand what perimenopause and menopause are — and when to expect them.
2. **Explain the volatility** Know why the hormonal shift is an erratic, “rollercoaster” experience for many.
3. **Recognize the symptoms** Spot the physical, cognitive, and mood changes — often while cycles are still regular.
4. **Time your guidance** Identify when to educate and offer anticipatory guidance across the transition.
5. **Evaluate & treat** Work up appropriately and match treatment — hormonal and non-hormonal — to the patient.

Perimenopause: patients need us here

- Perimenopause can be a volatile, erratic rollercoaster — and it lands in the middle of careers, caregiving, and relationships.
- Patients need us during this pivotal hormonal change; too often they're dismissed or misdiagnosed.
- Learn to recognize the symptoms and open the conversation — many patients won't name it themselves.
- Anticipatory guidance and education are essential — for patients and clinicians alike.
- Women live, on average, ~40% of their lives peri/postmenopausal. Let's help them navigate it confidently.

"Midlife puberty" — a second, unpredictable hormonal transition, in reverse.

What is perimenopause?

Some definitions

- **The midlife transition**

“Midlife puberty” — hormones shifting, in reverse

- **The years leading up to the final menstrual period**

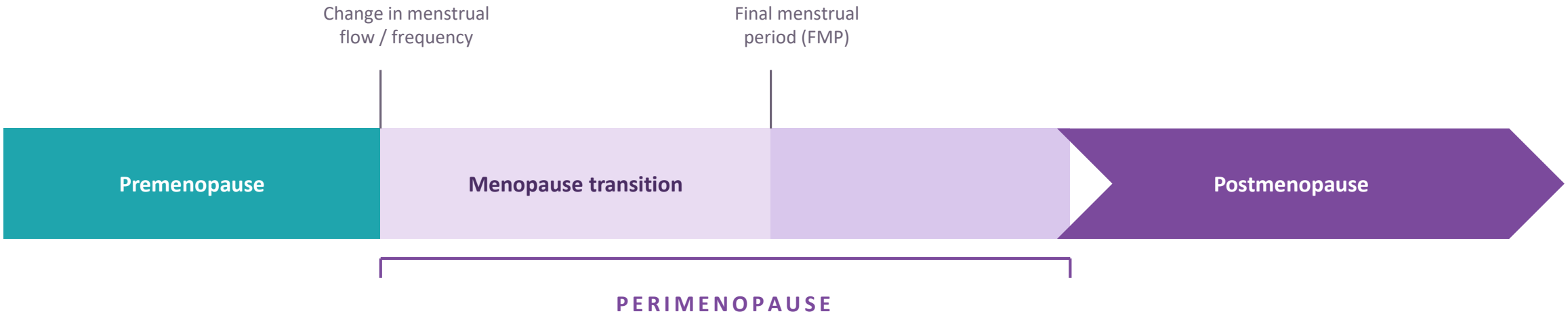
Begins when cycles start to change; by convention includes the 12 months after the final period

The Menopause Society

As a woman reaches perimenopause, the ovaries produce hormones erratically and release an egg less often. Early changes are subtle — cycles often shorten; bleeding days and flow may increase or decrease. As perimenopause progresses, cycle length may vary by 7 days or more. Early on it may be an occasional skipped period; in the late transition, women may skip 60 days or more.

The Menopause Society; Harlow et al., Menopause 2012

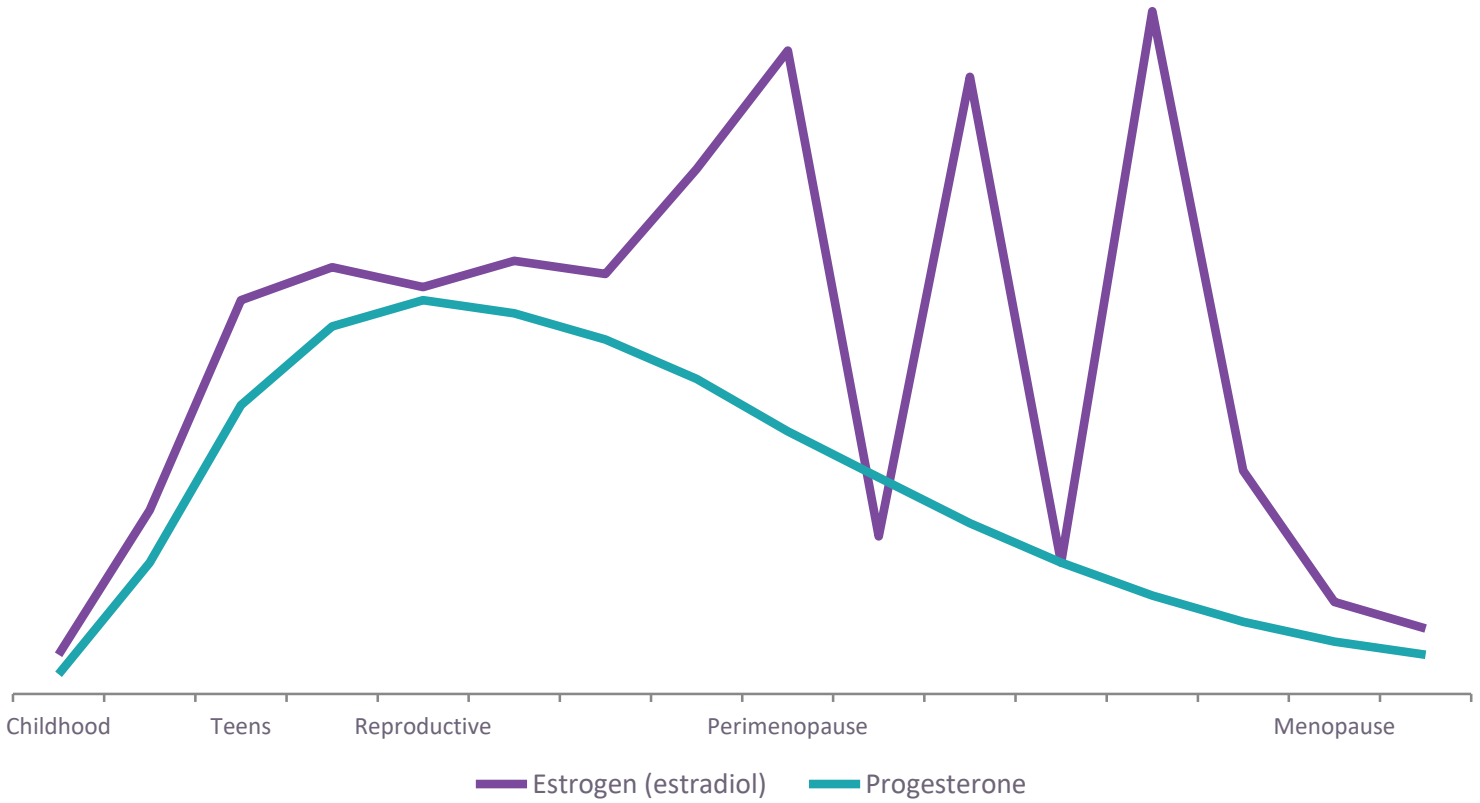
The stages of the transition



FMP + 12 months = menopause (diagnosed retrospectively)

Perimenopause spans the menopause transition through the first 12 months after the final period.

The hormonal rollercoaster



What's happening

- **Up to ~3× more estrogen in surges — then sharp drops.**
- Progesterone falls earlier and steadily as ovulation becomes erratic.
- It's the swing — not a low level — that drives many symptoms.
- **"Estrogen dominance" relative to progesterone, in bursts.**

The impact

1.3 M
U.S. women reach menopause each year

~80%
have bothersome menopausal symptoms

51.4
average age of the final menstrual period

7–10 yr
perimenopause can precede the final period

~40%
of life can be spent peri / postmenopausal

- Women make up 50.5% of the U.S. population — this is not a subspecialty issue, it's core primary care.
- The transition overlaps peak career and caregiving years, magnifying its impact on work, relationships, and health.

SWHR; SWAN (Santoro et al. 2021)

SWAN: Study of Women's Health Across the Nation

Vasomotor symptoms (VMS)

- Peak incidence in late perimenopause (~age 49).
- **Median total duration ~7.4 years.**
- **Persists ~4.5 yr after the final period.**
- Duration varies by race/ethnicity:

Black women ~10.1 yr (longest)

Hispanic ~8.9 yr · White ~6.5 yr

Chinese ~5.4 yr · Japanese ~4.8 yr

What lengthens VMS

- **BMI > 30**

~1.5× more frequent VMS

- **Smoking (heavy, long-term)**

~2× more frequent VMS; also earlier menopause

- **Onset in early perimenopause**

Longest overall duration (>11 yr)

Also: perceived stress, depression, lower education.

Avis et al., JAMA Intern Med 2015; Santoro 2021

Perimenopause symptoms

What patients report

- Increased anxiety; feeling more “on edge”
- Fatigue
- Low mood / feeling down
- Overwhelmed, less able to cope
- Difficulty concentrating (“brain fog”)
- Irritability, agitation, anger
- **“Not feeling like myself”**

The catch

These symptoms often appear while cycles are still regular — so the hormonal cause is easy to miss.

Mood & cognition can shift before periods do.

The STRAW +10 staging framework

The reference system for staging reproductive aging. Menopause = the final menstrual period (FMP = 0).

	Late Reproductive (−3)	Early Transition (−2)	Late Transition (−1)	Early Postmeno. (+1)	Late Postmeno. (+2)
Menstrual cycle	Subtle change in flow / length; still cyclic	Persistent ≥7-day difference in consecutive cycle length	Amenorrhea ≥ 60 days	FMP = 0; no further menses	None
FSH	Low–normal, variable, rising	Variable, elevated	↑, variable; ≥25 IU/L (random draw)	Elevated; stabilizes by +1c	Stabilized / high
Duration	Variable	Variable	1–3 years	~2 yr (+1a/b), then 3–6 yr (+1c)	Remaining lifespan
Symptoms	—	VMS possible	VMS likely	VMS most likely	Urogenital / GSM ↑

Perimenopause = Early Transition (−2) through the first 12 months after the FMP (shaded).

Harlow et al., Menopause 2012 (original recreation)

Volatile & erratic: what patients say

“Pressure-cooker feelings — I have a short fuse.”

“I don't feel like — or recognize — myself anymore.”

“I rationalize that I'm not being rational.”

“My brain feels foggy, and that's scary.”

“The symptoms don't happen all the time.”

“My body is changing — my hair is falling out, and growing in new places.”

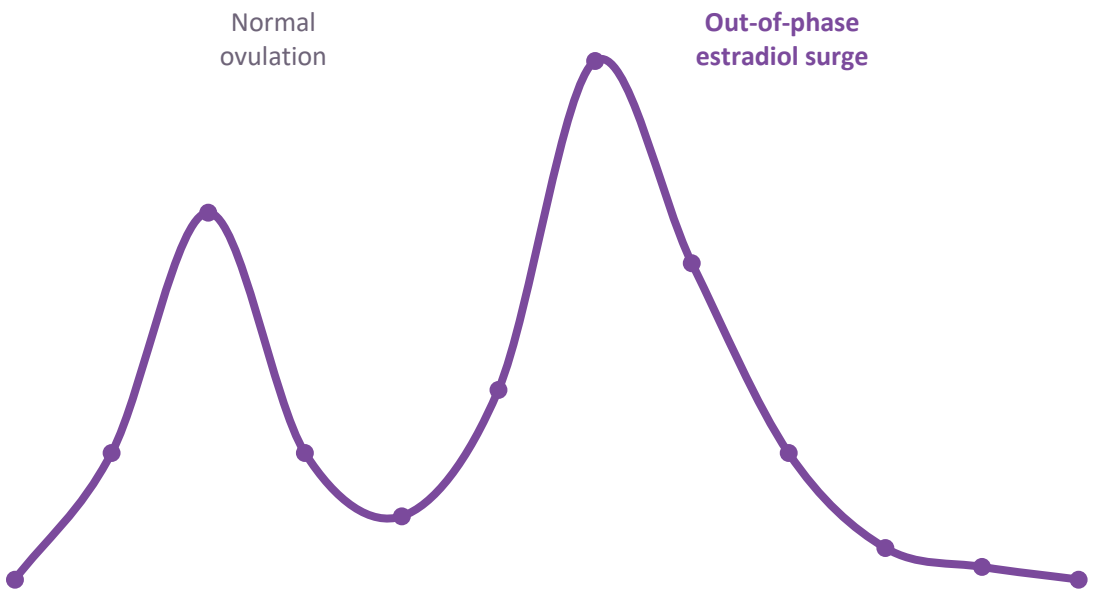
“It's like I'm going through puberty again.”

“I can't sleep!”

The LOOP cycle: luteal out-of-phase event

What is a LOOP?

- **Luteal Out-Of-Phase event.**
- A new follicle is recruited during the luteal phase — out of sequence.
- It drives a second, exaggerated estradiol surge — estrogen far above the normal peak.
- The result: unpredictable highs, then crashes — the physiologic basis of the “rollercoaster.”
- **Explains why symptoms come in waves, not a steady decline.**



This is the rollercoaster — written in the hormone curve.

Hale et al., Menopause 2009

How to identify perimenopause

- **Listen to your patient.**
- Dynamic conversations matter — and they take time; build it into the visit.
- Include perimenopause in the differential starting at age 35.
- **There is no lab test that diagnoses perimenopause — the diagnosis is clinical.**
- Treat “not feeling like myself” as a legitimate symptom, not a throwaway line.
- Recognize expected bleeding changes vs. bleeding that needs evaluation.

Perimenopause is a diagnosis you make by listening — not by ordering an FSH.

Menopause: 12 months without a period

Definition

A retrospective diagnosis: 12 consecutive months with no menstrual period, with no other cause. The average age is ~51.

You only know the date after the fact.

Common symptoms

- Hot flashes
- Night sweats
- Sleep disturbance
- Fatigue
- Brain fog
- Dry skin
- Joint pain
- **Changes in sexual desire**

So… is it all menopause? Do they need labs?

The myth

A person doesn't need blood work to diagnose puberty — and they don't need it to diagnose perimenopause. What a clinician does need is to listen and keep perimenopause / menopause on the differential.

People are whole people — it can be everything at once.

Where labs do help

- Rule in / rule out mimics — thyroid disease, low ferritin, etc.
- **…but a patient can have a thyroid disorder, low ferritin, AND be perimenopausal.**
- Risk-stratify for the years ahead: cardiovascular disease, clotting disorders, hereditary cancer risk.

The long view: menopause & long-term health

Bone

- Vitamin D deficiency
- Osteopenia → osteoporosis
- Sarcopenia; loss of fitness

Mood & cognition

- Memory / concentration changes
- Mood shifts, depression risk
- Long-term dementia risk

Cardiovascular

- Atherosclerosis, hypertension, VTE
- Dyslipidemia, insulin resistance
- Central fat redistribution

Genitourinary (GSM)

- Recurrent UTIs
- Urinary incontinence
- Vaginal/vulvar atrophy, prolapse

AMS; NAMS/Menopause Society

Patients need you — here's why

You are often the first — and sometimes the only — clinician who catches this.

- **You catch it first — often before she can name what's happening.**
- Your validation is treatment: normalizing “not myself” changes how she copes.
- This is the window to lock in bone, heart, and brain health for the decades ahead.
- Perimenopausal “zest” is real — you get to hand it back to her.
- **And you can actually treat this — hormonal and non-hormonal options work.**

Normalize · Validate · Plan · Treat

Treatment: non-hormonal (NK antagonists)

Fezolinetant (Veozah)

- **Selective NK3 antagonist — 45 mg PO once daily.**
- For moderate-to-severe VMS.
- **BOXED WARNING: hepatotoxicity (Dec 2024).**
- **LFTs at baseline, then monthly × 3 months, then at 6 and 9 months.**
- Don't start if ALT/AST or bilirubin ≥ 2× ULN; stop if > 5× ULN.
- Contraindicated: cirrhosis; CYP1A2 inhibitors.

Elinzanetant (Lynkuet)

- **Dual NK1 + NK3 antagonist — 120 mg (two 60 mg capsules) PO nightly.**
- For moderate-to-severe VMS; also improves sleep.
- **FDA-approved Oct 2025 — no boxed warning.**
- **LFTs at baseline and 3 months (lighter than fezolinetant).**
- Somnolence (driving caution); reduce to 60 mg with moderate CYP3A4 inhibitors; avoid inducers.

FDA labels 2023–2025; LiverTox 2025

A contemporary view of hormone therapy

- Enthusiasm for menopausal hormone therapy has waxed and waned — and both treatment and clinician training fell sharply after the 2002 WHI results.
- **WHI studied older, largely asymptomatic women — yet its findings were over-extrapolated to all estrogens, all women, and all routes.**
- Conjugated equine estrogen + medroxyprogesterone are no longer the default — all hormones are not equivalent (different pharmacodynamics, duration, receptor affinity, risk/benefit).
- **The modern standard: the right formulation, at the right dose and time, for the right patient — individualized, not one-size-fits-all.**

Our patients deserve a nuanced, individualized approach.

Levy B, Simon JA. Obstet Gynecol 2024;144(1):12–23

Hormone therapy vs. combined OCP

Combined OCP (pill / patch / ring)

- Higher hormone dose than HT; higher VTE risk.
- **If no risk factors, can continue to ~age 55.**
- **Pearl: use continuous dosing.**
- ~15% report libido decline; watch mood changes.
- Watch hormonally-mediated vestibulodynia → dyspareunia and GSM.

Hormone therapy (HT)

- Many doses and routes; lower estrogen dose.
- **Often better tolerated, fewer side effects.**
- **“Bioidentical” is a marketing term — “body-similar” is more accurate.**
- Progestin-only pills can pair with an estradiol patch — treats bleeding while using body-similar estrogen.
- Combination: estrogen + progestin, or progestin-only.

Estradiol & progestin: standard dosing

Estradiol — “standard” dose

- **Oral: 1 mg daily**
- **Transdermal: 0.05 mg/day**

Rx: estradiol patch 0.05 mg, twice weekly

- Transdermal avoids first-pass; preferred with VTE risk.
- **It is never one-size-fits-all — honor the rollercoaster.**

Progestin — endometrial protection

- **Anyone with an intact uterus needs a progestin.**
- **First choice: oral micronized progesterone**

Cyclic 200 mg × 12 days/mo (more side effects) or daily 100 mg

- Take in the evening (somnolence); vaginal route can avoid side effects.
- **Progestin IUD: treats bleeding, protects endometrium, adds contraception, no systemic effects.**

Potential side effects & bleeding work-up

Common side effects

- Bloating / fluid retention
- Breast tenderness or swelling
- Bleeding
- Mood swings
- Stomach upset / headaches
- Rash from patch adhesive
- **Many are progesterone-related — switching to the vaginal route can resolve them.**

Evaluating bleeding

- **Pelvic ultrasound to assess bleeding.**
- Endometrial biopsy if indicated.
- **Consider alternative endometrial protection:**

progestin-only pills, LNG-IUD, or another progestin form

More hormone-therapy pearls

HT is not a cure-all	It won't fix weight gain, aging, fatigue, thinning hair, or brain fog on its own.
“Bioidentical” still carries risk	Compounded HT is not FDA-regulated for purity or efficacy — prefer approved products.
Premature menopause	Continue HT until the natural age of menopause (~52), then reassess.
No hard age cutoff to stop	Individualize by risk and symptoms; favor lower doses and transdermal with age.
Vaginal estrogen is different	Low-dose vaginal estrogen can be used long-term for moderate-severe GSM.

Testosterone: the third hormone

What the evidence supports

- **One established indication: HSDD in postmenopausal women (Global Consensus, Davis 2019).**
- Benefits beyond libido — mood, energy, cognition, bone/muscle — are emerging, not established.
- **Perimenopausal use is off-guideline and individualized — data are thinnest here.**
- No FDA-approved female product → use an approved male gel off-label at ~1/10 the male dose, transdermal only.

The measurement trap

- **No blood level diagnoses low desire — and none is a treatment target.**
- Total T doesn't correlate with symptoms; assays are unreliable at female ranges (use LC-MS/MS).
- Measure only to (1) flag a mid/high baseline and (2) keep therapy out of the supraphysiologic range.
- **There is no target number to treat to.**

Davis et al. 2019; Parish et al. 2021; Kling 2025

Testosterone: prescribing quick reference

Candidate & starting Rx

- Candidate: postmenopausal woman with distressing, acquired, generalized HSDD, after biopsychosocial work-up.
- **Rx: testosterone 1% gel, 0.5 mL (~5 mg) daily, transdermal.**
- Apply to back of calf / outer thigh / buttock; counsel on transference (kids, partners, pets).
- **Avoid pellets, compounded, injected, and oral — supraphysiologic / unregulated.**

Monitor & set expectations

- Baseline: total T + SHBG (same lab); lipid panel + LFTs to screen contraindications.
- **Recheck total T at 3–6 wk (and after dose changes), then every 4–6 months.**
- Benefit by ~6–8 wk; maximal ~12 wk. Watch acne, hirsutism, voice, alopecia.
- **Stop at 6 months if no meaningful benefit; otherwise continue as long as it helps.**

Parish et al. 2021; Kling, Obstet Gynecol 2025

Objectives revisited

- **Define the transition** Understand what perimenopause and menopause are — and when to expect them.
- **Explain the volatility** Know why the hormonal shift is an erratic, “rollercoaster” experience for many.
- **Recognize the symptoms** Spot the physical, cognitive, and mood changes — often while cycles are still regular.
- **Time your guidance** Identify when to educate and offer anticipatory guidance across the transition.
- **Evaluate & treat** Work up appropriately and match treatment — hormonal and non-hormonal — to the patient.

Resources & references

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