

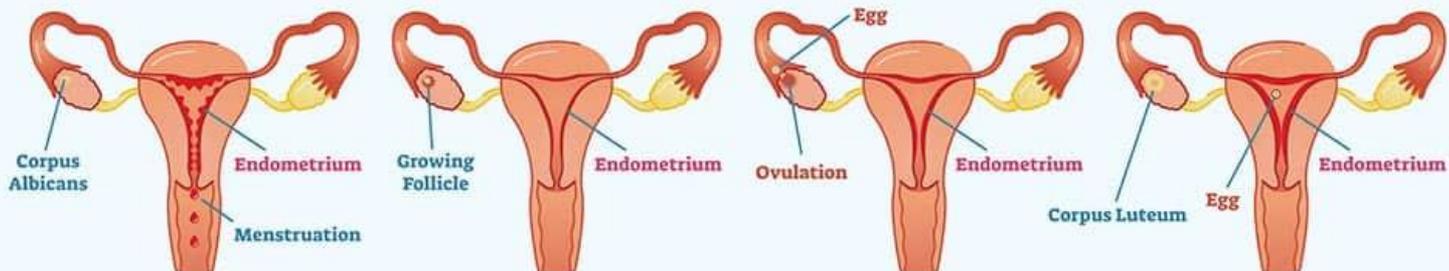
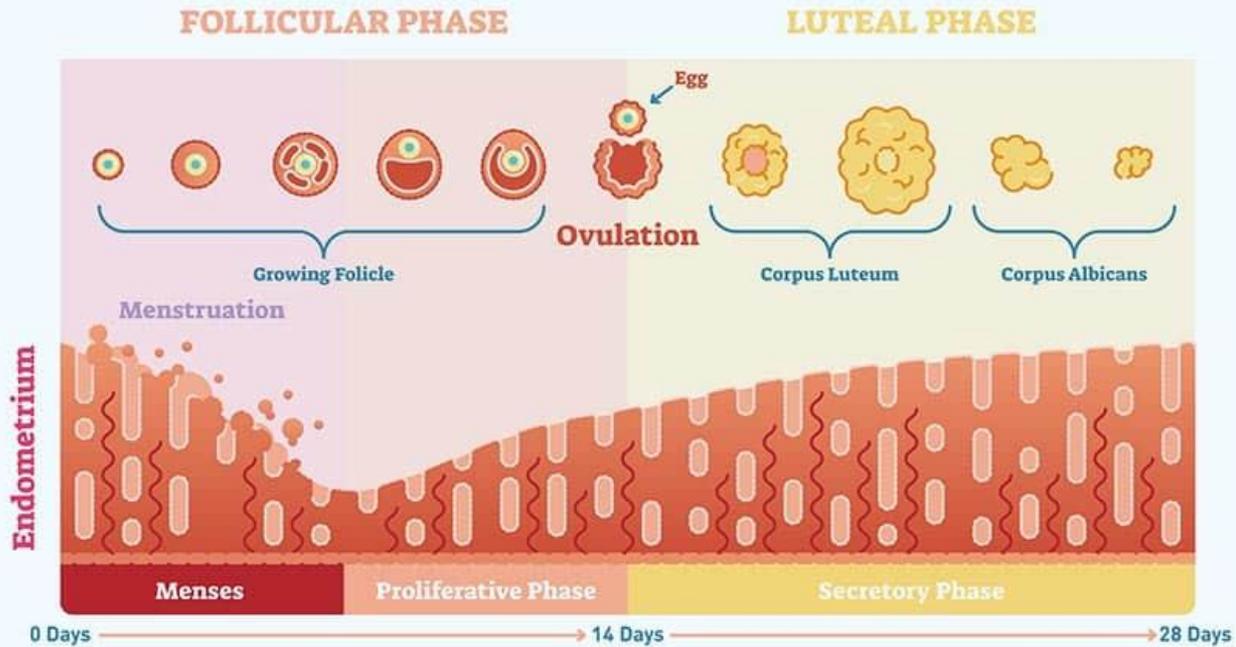
Endometrial Thickness

- Modality:
 - Transvaginal ultrasound is the standard for measurement; transabdominal is less accurate and mainly adjunctive
- Technique:
 - Measure the “endometrial stripe” in the mid-sagittal uterine plane, from one echogenic basal interface to the other, as a single anteroposterior double-layer thickness; **exclude any intracavitary fluid.**





FEMALE SEXUAL CYCLE



Premenopausal, cycling patient

- Menstrual phase: about 1–4 mm, thin echogenic line or interrupted stripe.
- Early proliferative (just after menses): about 4–7 mm, hypoechoic functionalis with echogenic basalis lines.
- Late proliferative / periovulatory: about 8–12 mm, often trilaminar “triple-line” pattern.
- Secretory phase: about 12–16 mm, uniformly echogenic and more bulky.
- In radiology practice,
 - A cycling endometrium up to roughly **14–16 mm** can be physiologic if the timing matches the late proliferative/secretory phase and there is no red-flag clinical scenario

Perimenopausal

- Patterns are variable; thickness may fluctuate, but many references still expect values similar to premenopausal ranges if cycles continue.
- Interpretation leans heavily on symptoms (especially abnormal uterine bleeding) and risk factors; “normal” is less strictly defined than in clearly pre- vs postmenopausal patients.

Postmenopausal (key radiology cutoffs)

- For transvaginal US in a woman with a documented menopause:
- With postmenopausal **bleeding**:
 - ≤ 4 –5 mm double-layer thickness has a very low risk of endometrial carcinoma and is generally considered “thin”/normal; no biopsy needed if bleeding resolves.
 - **4–5 mm is considered abnormally thick** in this setting and usually prompts endometrial sampling.
- Asymptomatic (**no bleeding**):
 - Most sources describe a normal stripe as thin (around 1–4 mm), and values up to about 10–11 mm may still be acceptable, but this is where risk-stratified decisions come in.
 - A commonly cited threshold: **>10–11 mm** should prompt **consideration of biopsy** because cancer risk rises to around 6–7%

Important caveats

- A “thin” endometrium does not completely exclude cancer; several studies show a small but non-zero proportion of cancers occur with thickness <4 mm, especially in symptomatic or higher-risk groups.
- Conversely, many women with thickness above these thresholds have benign conditions (e.g., polyps, hyperplasia without atypia), so biopsy is required for diagnosis.