Abnormal Uterine Bleeding in Perimenopause & Menopause

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Disclosures

- I am a certified Organon instructor for Nexplanon training
- I have not received any renumeration for that in several years

Objectives

Collect	Collect the pertinent history in a patient with AUB, focusing on cycle history
Differentiate	Differentiate between the three main types of work up: ovulatory, anovulatory, and post-menopausal
Perform	Perform an appropriate physical exam & endometrial biopsy if indicated
Order	Order the appropriate diagnostic testing depending on the situation
Treat	Treat with appropriate medications or referral depending on cause of bleeding

What's normal?

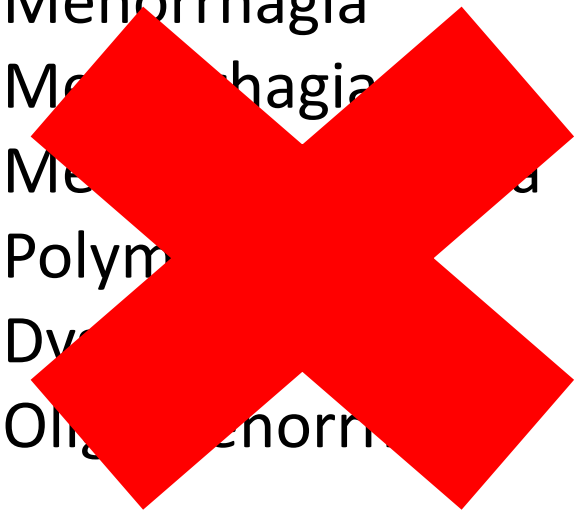
- Cycle length of 24-38 days
- Varies by less than 10 days
- Premenstrual symptoms or ovulation symptoms

--> "Ovulatory"

- <80 mL blood loss
  - Fully saturated regular pad holds 5 mL (nighttime 10-15)

What is the diagnosis?

- Menorrhagia
- Metrorrhagia
- Menometrorrhagia
- Polymenorrhea
- Dysmenorrhea
- Oligomenorrhea



- **Just say AUB. (and then describe it)**
- **The most helpful will be to decide: ovulatory or anovulatory**

Further definitions PALM - COEIN

	PALM-COEIN	Tips
Structural	**P**olyp	Intermenstrual bleeding
	Adenomyosis	Painful, heavy
	Leiomyoma	Painful, heavy
	Malignancy & Hyperplasia	Anovulatory, high risk
		(cervical: post-coital)
Non-structural	**C**oagulopathy	Other bleeding issues
	Ovulatory dysfunction	PCOS, hypothyroid, perimenopause
	Endometrial	?Primary heavy menses
	Iatrogenic/Infectious	Contraceptives, antipsychotics
	Not yet classified	?Chlamydia, trich

What's normal in perimenopause?

- Vasomotor symptoms (80%)
  - Symptoms last about 7-8 years (3 years before, 4 years after)
- Genitourinary symptoms (50%)
  - Symptoms continue to progress
- Menstrual cycle changes (100%)
  - Cycles become longer or shorter, bleeding becomes heavier or lighter

Perimenopausal bleeding – is it abnormal or not?

- There are no clear guidelines to determine what is “normal” for perimenopause
- You need to estimate the patient’s risk for endometrial cancer
- BIOPSY if you think this is a risk
  - Age >45 with heavier, more frequent menses
  - Age >35 with prolonged anovulatory cycles, or AUB with other risk factors
  - Consider length of time with symptoms and risks!
- Imaging (ultrasound) may assist in work up but will **not** replace need for biopsy to rule out cancer

Case 1

A 43-year-old woman presents with a complaint of pelvic cramps with her menses over the past 6 years. She describes her periods as heavy and says they occur once a month and last for 7 days, with no spotting in between. She says her periods have slowly become heavier since age 40. Her vitals are normal and her BMI is 25. She has no other medical problems.

What other history do you want?

What exam do you want to do?

Case 1

Her pelvic exam demonstrates a uterus that is 9 cm in size. Cervix is normal. No bleeding is seen. Which one of the following would be the **most** appropriate next step?

A) Endometrial biopsy

B) Ultrasonography

C) TSH level

D) Naproxen prior to and during menses

Work up of heavy, regular menses

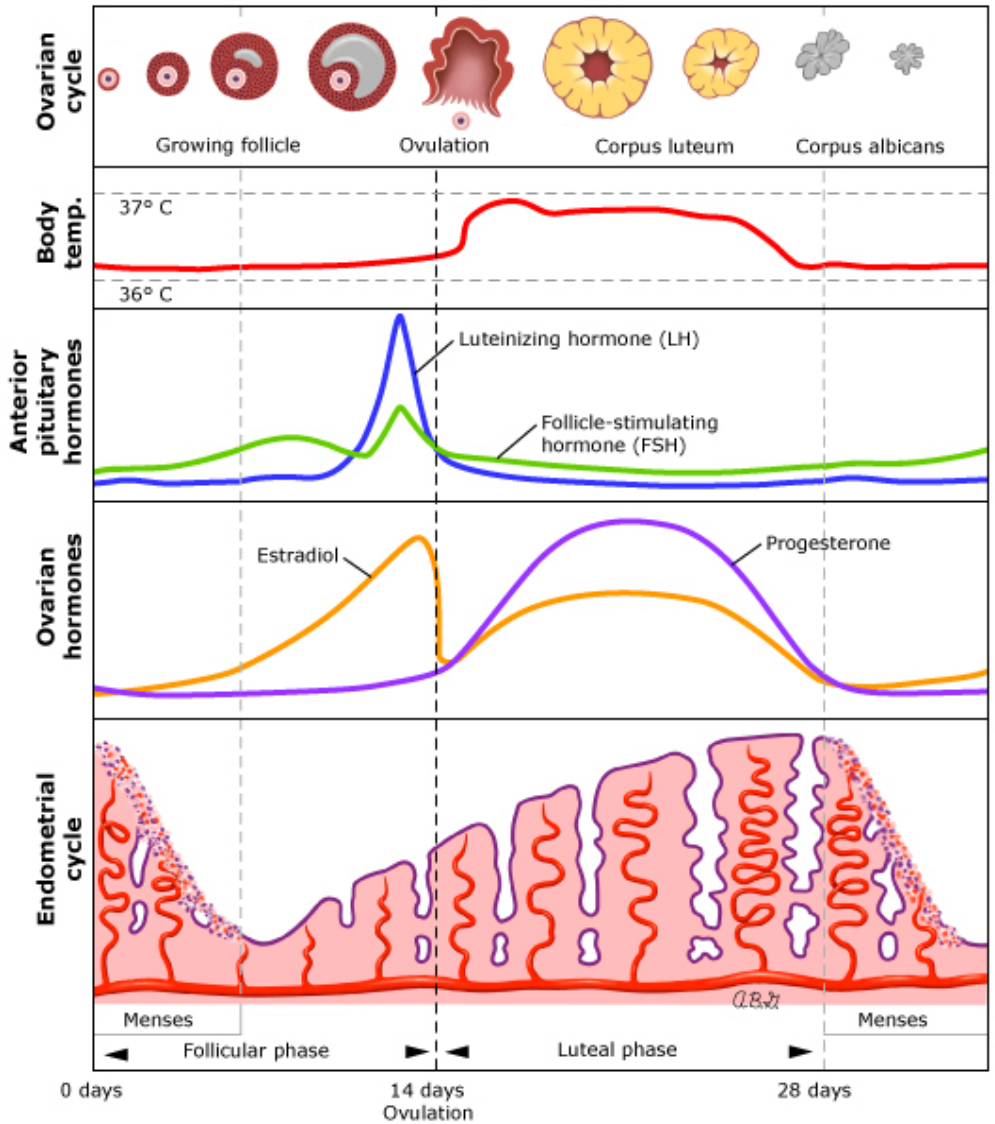
- Most commonly from STRUCTURAL causes (PAL)
- Transvaginal ultrasound
  - Adenomyosis, endometriosis, fibroids
- CBC, ferritin, TIBC
  - Iron replacement or iron infusions
- Consider endometrial biopsy, particularly with other risk factors or lack of diagnosis after ultrasound/lack of improvement with treatment, and after age 45

Management of regular, heavy menses

- Levonorgestrel IUD (Mirena)
- Progesterone daily
  - Medroxyprogesterone 10 – 20 mg daily, Norethindrone 2.5 – 5 mg daily, or Progesterone 100-200 mg daily
- Oral contraceptive pills
- Tranexamic acid
  - 1500 mg TID for 5 days each menses
- NSAID
  - Naproxen 500 mg BID before/during menses

Acute, heavy bleeding management

- Estrogen
  - 25 mg IV or 2.5 mg orally, every 6 hours
- High-dose OCP
  - Three tabs daily, tapering slowly over 7-14 days
- High-dose progesterone
  - Medroxyprogesterone 10 – 20 mg TID tapering to once daily, Norethindrone 5 mg TID tapering to once daily
- Tranexamic acid
  - 10 mg/kg IV q8 hrs, or 1300 mg oral TID x 5 days



Naproxen and other NSAIDs work by inhibiting prostaglandin synthesis to decrease volume of menstrual flow and decrease pelvic cramping.

Case 1, continued

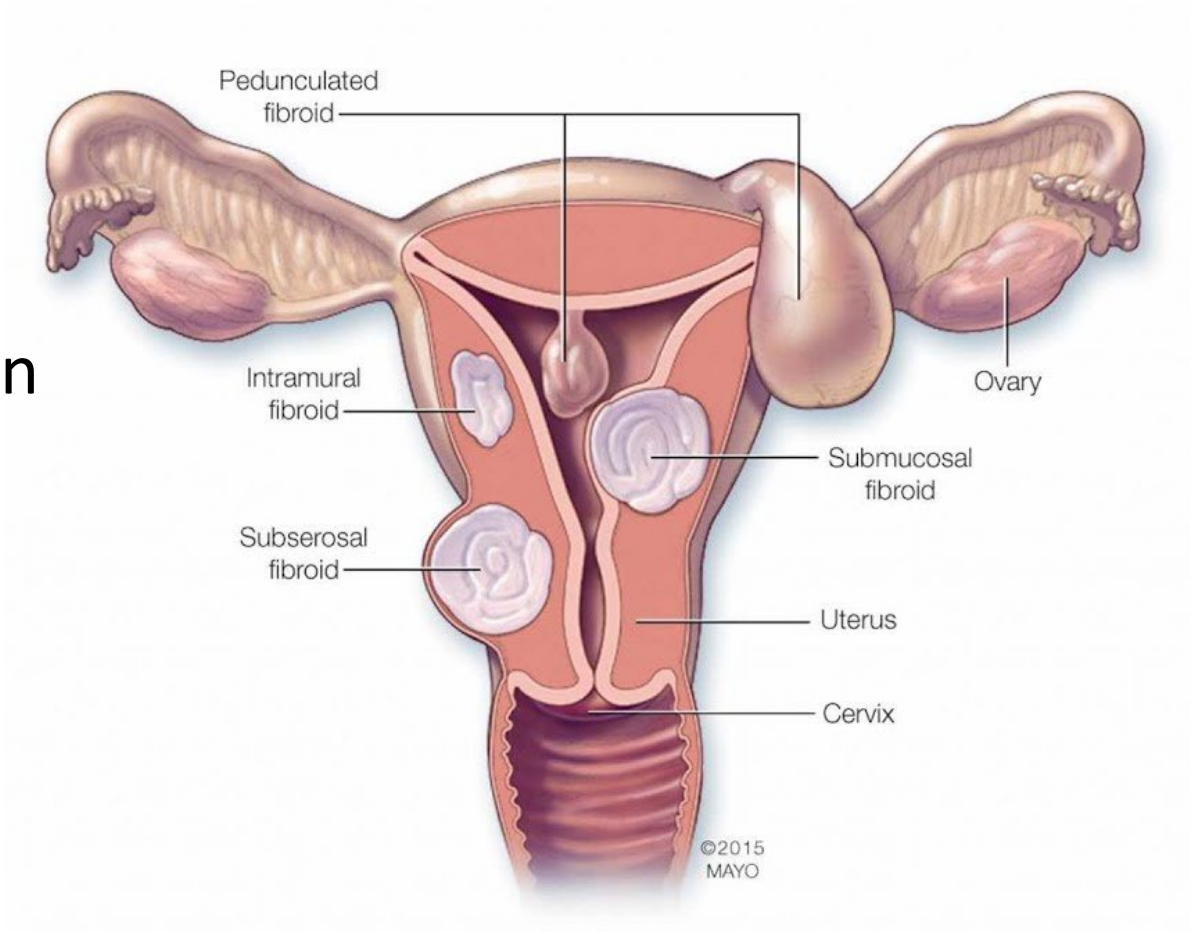
- You see the patient in follow up after her ultrasound. Lab work is normal without iron deficiency anemia, and ultrasound shows several 4-5 cm fibroids in the uterus. What do you recommend to the patient as **first-line** treatment?
  A. Hysterectomy
  B. Uterine ablation
  C. Oral contraceptive pills
  D. Levonorgestrel intrauterine device
  E. Uterine artery embolization

Treatment of leiomyoma – uterine preservation desired

- Levonorgestrel IUD
  - Report significantly less bleeding than with OCPs
- GnRH agonists
- Tranexamic acid
- NSAID (less effective than above options)
- OCP
- (There is no evidence for progesterone only, but it can be tried)

Treatment of leiomyoma - surgical

- Hysterectomy
- Myomectomy
- Uterine artery embolization



Case 2

You are seeing a 46-year-old woman who complains of irregular menses. She states that about 2 years ago, her menses started coming at irregular intervals. Sometimes they are light and last 2-3 days, and other times they are heavy, lasting up to 2 weeks. She will go 60-120 days between menses. She has one male sexual partner and does not use protection. Her last pregnancy was 10 years ago, and she is a G3P3. She has a past medical history of hypertension and hypothyroidism and takes amlodipine and levothyroxine. Her last menses was 4 weeks ago. Her exam, including a pelvic exam, is normal, other than a BMI of 40.

What is your differential?

What would you order next?

Differential

- Endometrial cancer or hyperplasia
- Normal perimenopause
- Thyroid disease
- PCOS (particularly if prior abnormal menses)
- Cervical disease (gonorrhea, chlamydia, cervical cancer)
- Endometrial polyp
- Pregnancy

Endometrial biopsy

- Indications:
  - AUB after age 45, or before age 45 with significant history of unopposed estrogen, persistent bleeding, or if medical management ineffective
  - Post-menopausal bleeding
  - Atypical glandular cells on pap, or endometrial cells on pap after menopause
- Risks
  - Discomfort
- Contraindications
  - Pregnancy
- Pre-medications: NSAID, topical lidocaine
- Results: Normal/endometrium in various stages of proliferation/degeneration, **polyp, hyperplasia with or without atypia, adenocarcinoma**

Endometrial biopsy

- Consent/time out
- **LMP? UPT? Chance of pregnancy?**
- Bimanual exam (uterine position and bulkiness)
- Speculum
- (optional) clean cervix with betadine
- (optional) Insert uterine sound
- **Stabilize cervix if needed with tenaculum or alice clamps**
- Insert endometrial biopsy catheter and withdraw plunger
- Turn catheter slowly to get each part of uterine lining, moving in and out as you do this
- Withdraw catheter and eject material into formalin
- Repeat x2-3
- Video

Case 2, continued

- The patient's blood work shows a normal TSH
- Pap, STI and pregnancy testing are negative
- Endometrial biopsy shows normal proliferative endometrium

- What next?

Treating peri-menopausal AUB (confirmed on work up)

- OCP
  - Aware of contraindications
- Progesterone-only
  - Cyclic (10-14 days a month) or daily
- Levonorgestrel IUD

- IF biopsy shows hyperplasia without atypia
  - Progesterone method (Levonorgestrel IUD or daily/cyclic progesterone)
  - Recheck biopsy in 3-6 months

Case 3

- A 62-year-old woman comes to the clinic with vaginal bleeding. She reports that she noticed spotting a few months ago that was intermittent, but now it has progressed to daily bleeding requiring her to change a pad several times a day. She is a G5P4014, and had regular menses from age 12 to age 53, at which time she had menopause. She is sexually active with one partner, and notes some vaginal dryness. Her last pap smear and HPV test were negative one year ago. She has no other medical problems and takes no medications.
- What is your next step?

Case 3

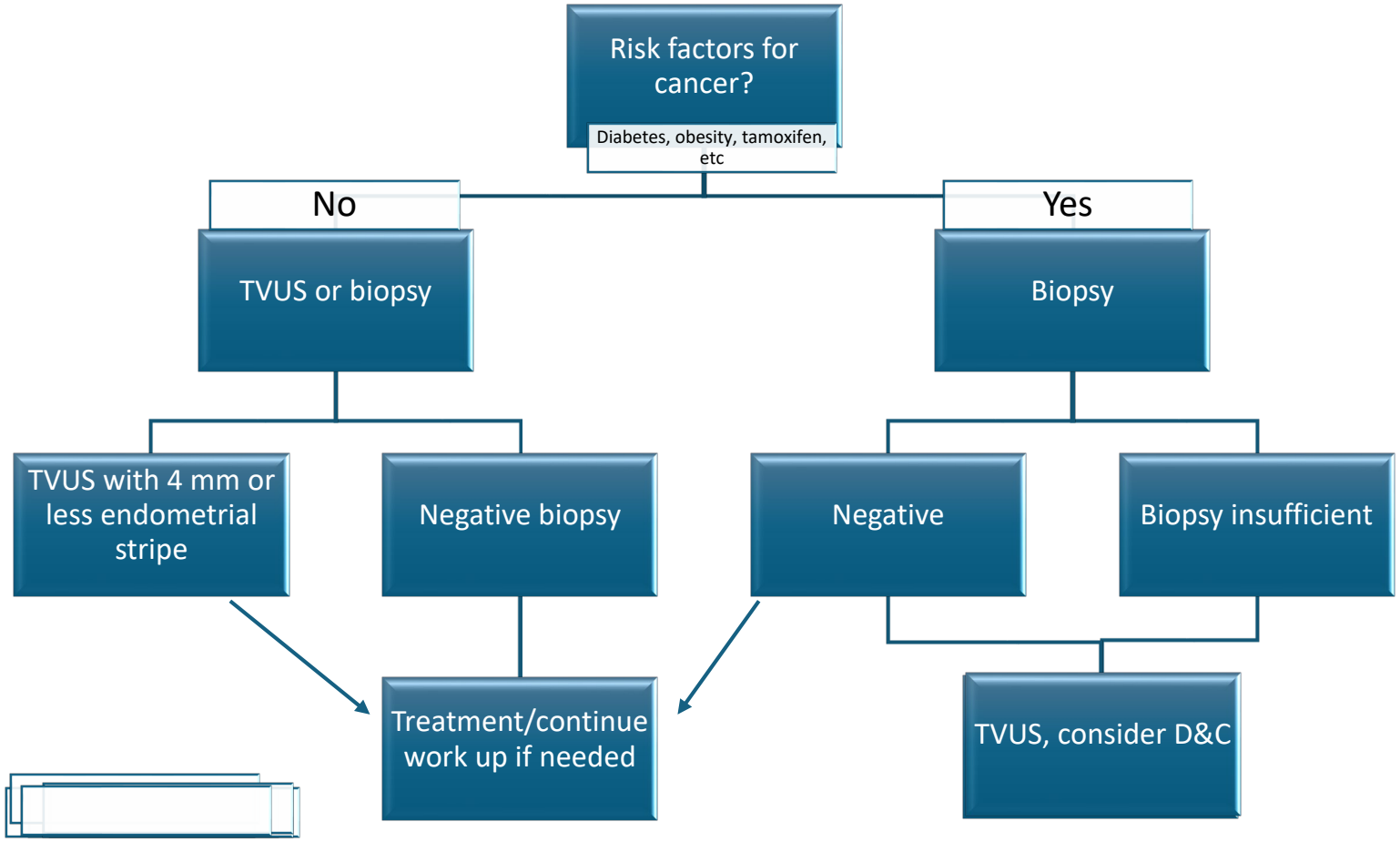
- The single most important next step is a pelvic exam
  - Determine source of bleeding
  - Examine size and position of uterus
  - Obtain swabs for cervical infection and cancer, if needed
  - Obtain endometrial biopsy the same day if able

- Labs?

Post-menopausal bleeding - differential

- The primary concern is cancer or hyperplasia/precancer
- Other causes include: anovulation, structural
- Bleeding can also be from vaginal/cervical/anal sources

Post-menopausal bleeding: work up



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