ABNORMAL UTERINE BLEEDING

MELISSA DEER, DO

CEDAR RAPIDS OBGYN SPECIALISTS

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- 788 8th Street (8th and 8th building)
- North Liberty location: 1765 Lininger Lane
- Five physicians
  - Drs. Alons, Bourgeous, Deer, Orr and Rexroth
- Three NPs and one PA
  - Jess Arp, Amy Steger, Laura Lipsett and Sashi Solomon
- NEW to the office is our pelvic floor physical therapist
  - Kristine Mace (Accepting new patients, all insurances!)
- Three US rooms for GYN and OB ultrasounds
- In house vaginitis and GC screening

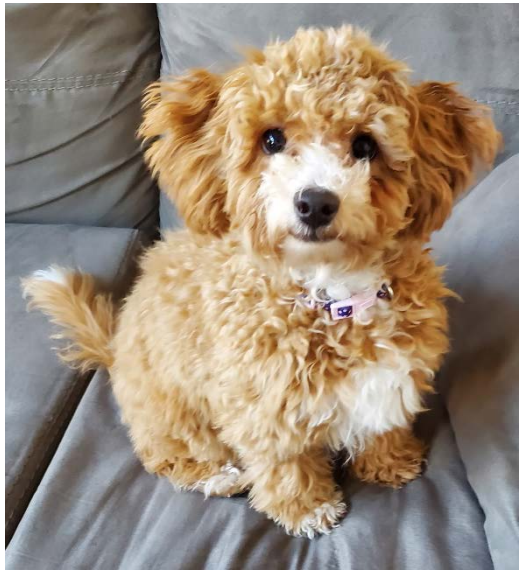
Cedar Rapids OB Gyn Specialists, P.C. and Female Continence Center

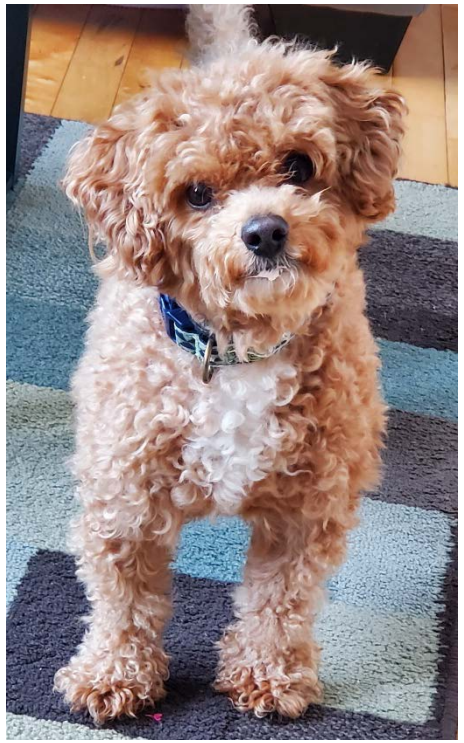
BACKGROUND

- Originally from Des Moines
- Graduated from Des Moines University
- Trained at the University of Nebraska Medical Center
- Joined CR OBGYN Specialists in 2018
- Interested in general OBGYN
  - AUB
  - Abnormal pap smears
  - Infertility
  - In-office procedures
  - Minimally invasive procedures

DISCLOSURES

- No financial interests





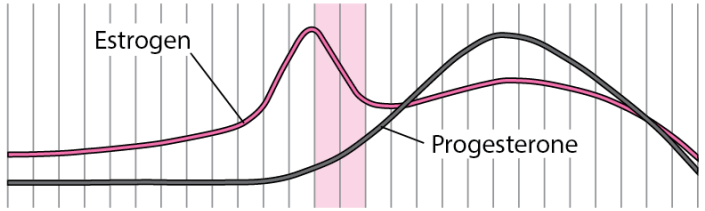
OBJECTIVES

- Abnormal uterine bleeding = AUB
  - Definition
  - Evaluation
  - Imaging
  - Management

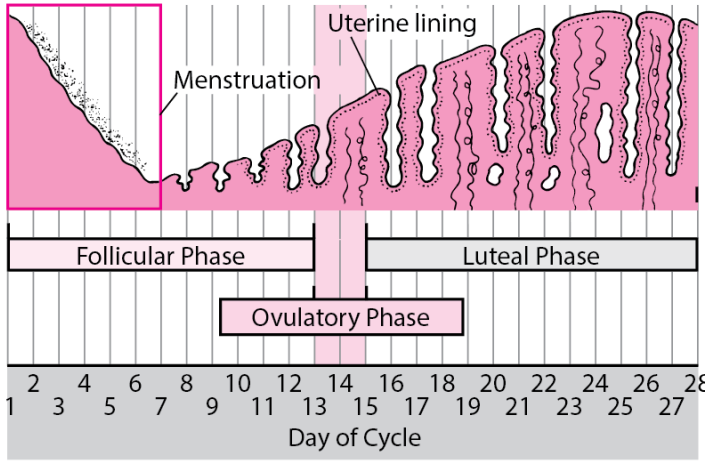
PREVALENCE

- One third of outpatient visits to GYN offices are for abnormal uterine bleeding
- Accounts for more than 70% of all GYN consults in the perimenopausal and postmenopausal years

NORMAL MENSTRUAL CYCLE

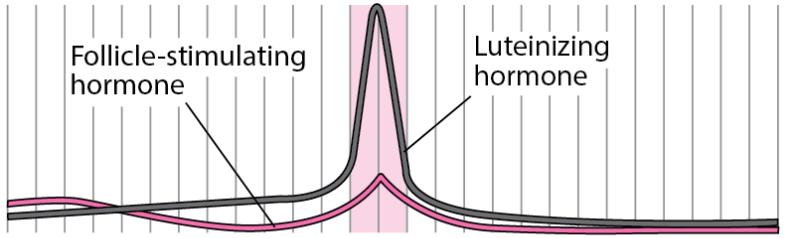


Sex Hormone Cycle

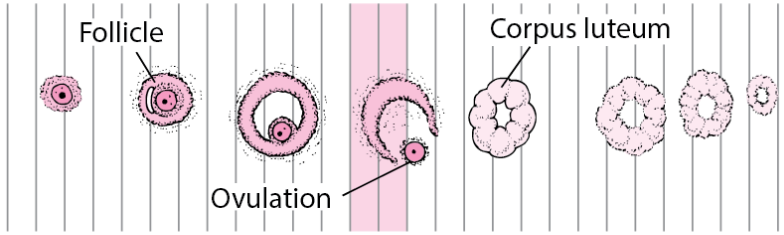


Endometrial Cycle

- CD1 = first day of heavy menstrual bleeding
- Cycle can vary 24-38 days
- Duration of bleeding: 4-8 days
- Variation between monthly cycles less than 7-9 days



Pituitary Hormone Cycle



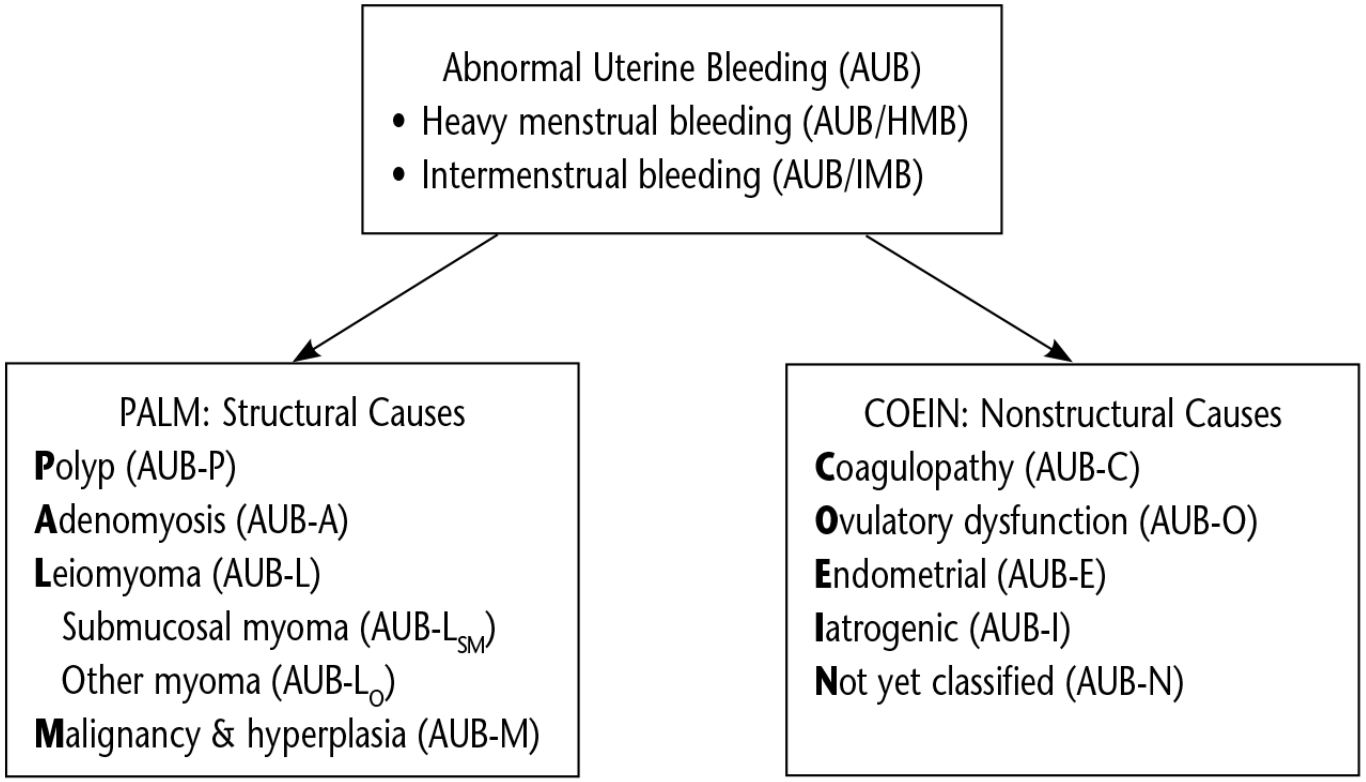
Ovarian Cycle

Image: https://www.merckmanuals.com/en-ca/home/women-s-health-issues/biology-of-the-female-reproductive-system/menstrual-cycle

DEFINING ABNORMAL PERIODS

- Older terms included:
  - Dysfunctional uterine bleeding, polymenorrhea, menorrhagia or metrorrhagia
- New term:
  - Abnormal uterine bleeding = AUB
    - Classified under PALM COEIN

PALM COEIN


Abnormal Uterine Bleeding (AUB)
• Heavy menstrual bleeding (AUB/HMB)
• Intermenstrual bleeding (AUB/IMB)
PALM: Structural Causes
Polyp (AUB-P)
Adenomyosis (AUB-A)
Leiomyoma (AUB-L)
Submucosal myoma (AUB-L_{SM})
Other myoma (AUB-L_{O})
Malignancy & hyperplasia (AUB-M)
COEIN: Nonstructural Causes
Coagulopathy (AUB-C)
Ovulatory dysfunction (AUB-O)
Endometrial (AUB-E)
Iatrogenic (AUB-I)
Not yet classified (AUB-N)

DIAGNOSIS

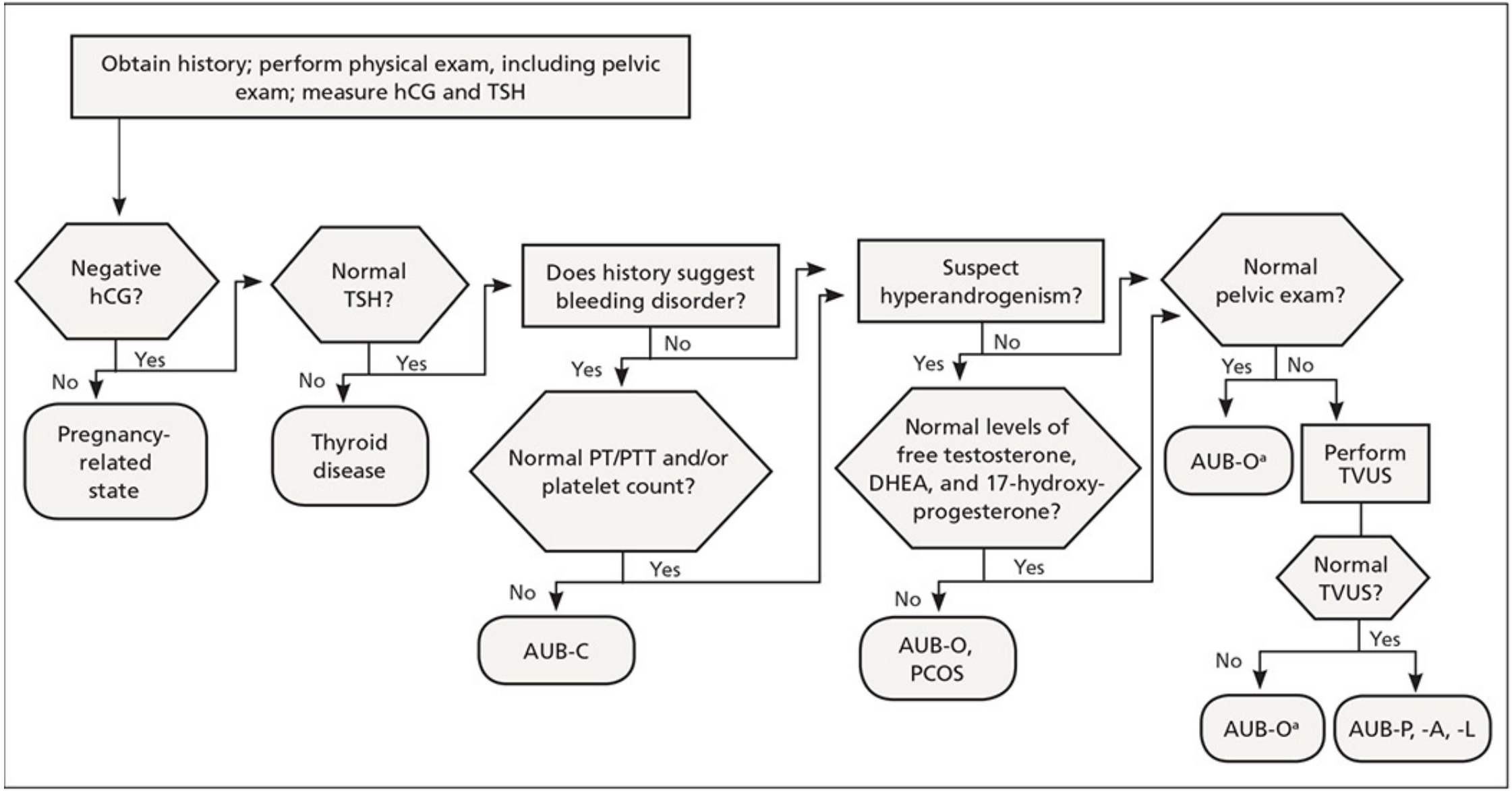
- Medical History
  - Ask about menstrual bleeding patterns, severity and pain associated with bleeding
  - Age of menarche and menopause if applicable
  - Surgical history (prior uterine surgeries or CS)
  - Use of medications
  - Family history of AUB or other bleeding problems
    - Up to 20% of women at any presenting age with HMB will have an underlying bleeding disorder
    - Screen for heavy menstrual bleeding
      - If screen positive, consider further eval with referral to heme/onc and testing for Von Willebrand Factor

DIAGNOSIS: PHYSICAL EXAM

- Elevated BMI or excessive weight (excess estrogen)
- Signs of
  - PCOS (hirsutism or acne)
  - Thyroid disease (nodule)
  - Insulin resistance
- Findings suggestive of bleeding disorder
- Pelvic exam
  - Speculum – assessing for cervical or vaginal lesions
  - Bimanual – assessing the size and contour of the uterus (fibroids)

DIAGNOSIS: LAB TESTS

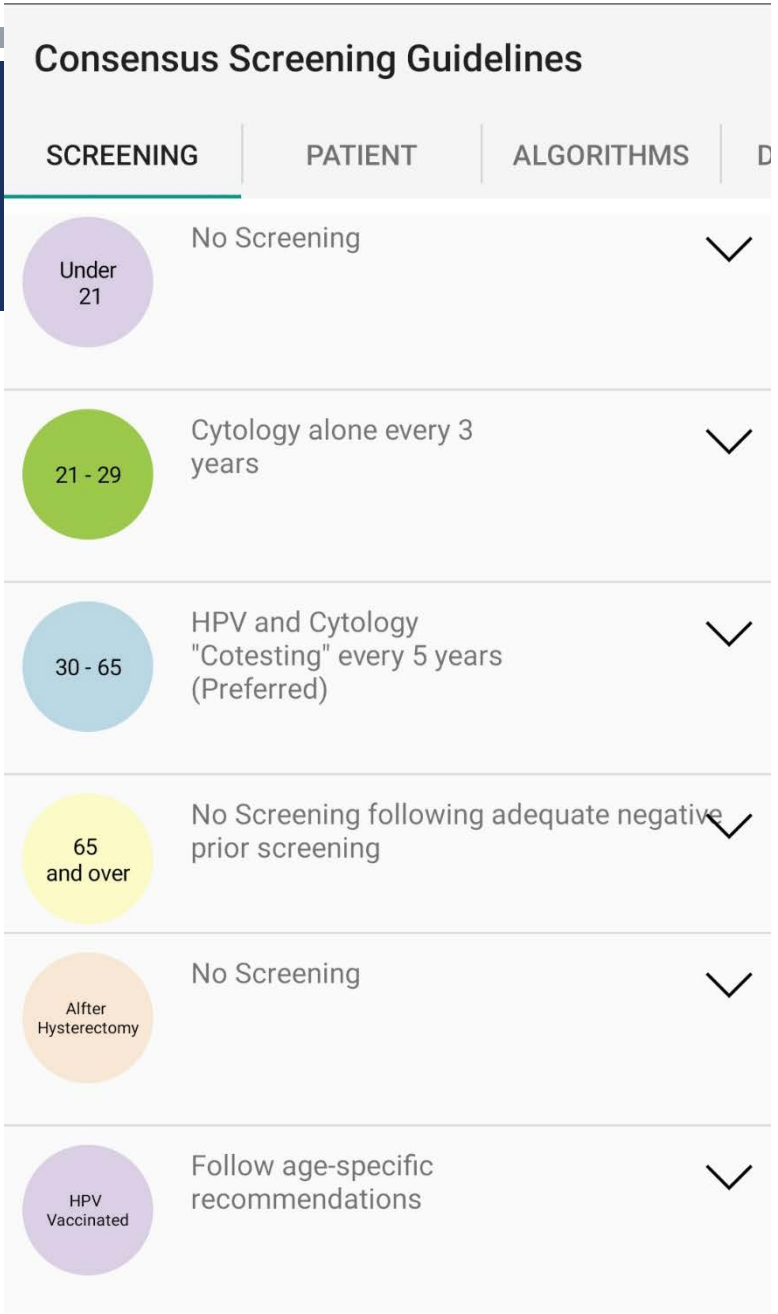
- Pregnancy test
- CBC
  - Objective measure of heavy menstrual bleeding – anemia
- TSH
- Update cervical cancer screening if needed
- Consider testing for chlamydia in patients high risk for infection



https://www.mdedge.com/familymedicine/article/195849/womens-health/systematic-approach-chronic-abnormal-uterine-bleeding?sso=true

CLINICAL PEARL: PAP SMEAR GUIDELINES

- ACOG and ASCCP
  - Initiate age 21 regardless of sexual status unless HIV positive or immunocompromised
    - Cytology only
    - Reflex HPV for ASCUS only
    - Repeat every 3 years
  - Age 30-65
    - Cytology and HPV
    - Repeat every 5 years
  - Discontinuation after age 65 if history of normal
  - If you ever have questions, please reach out via EPIC inbox or referral to GYN



DIFFERENTIAL DIAGNOSIS BASED ON AGES

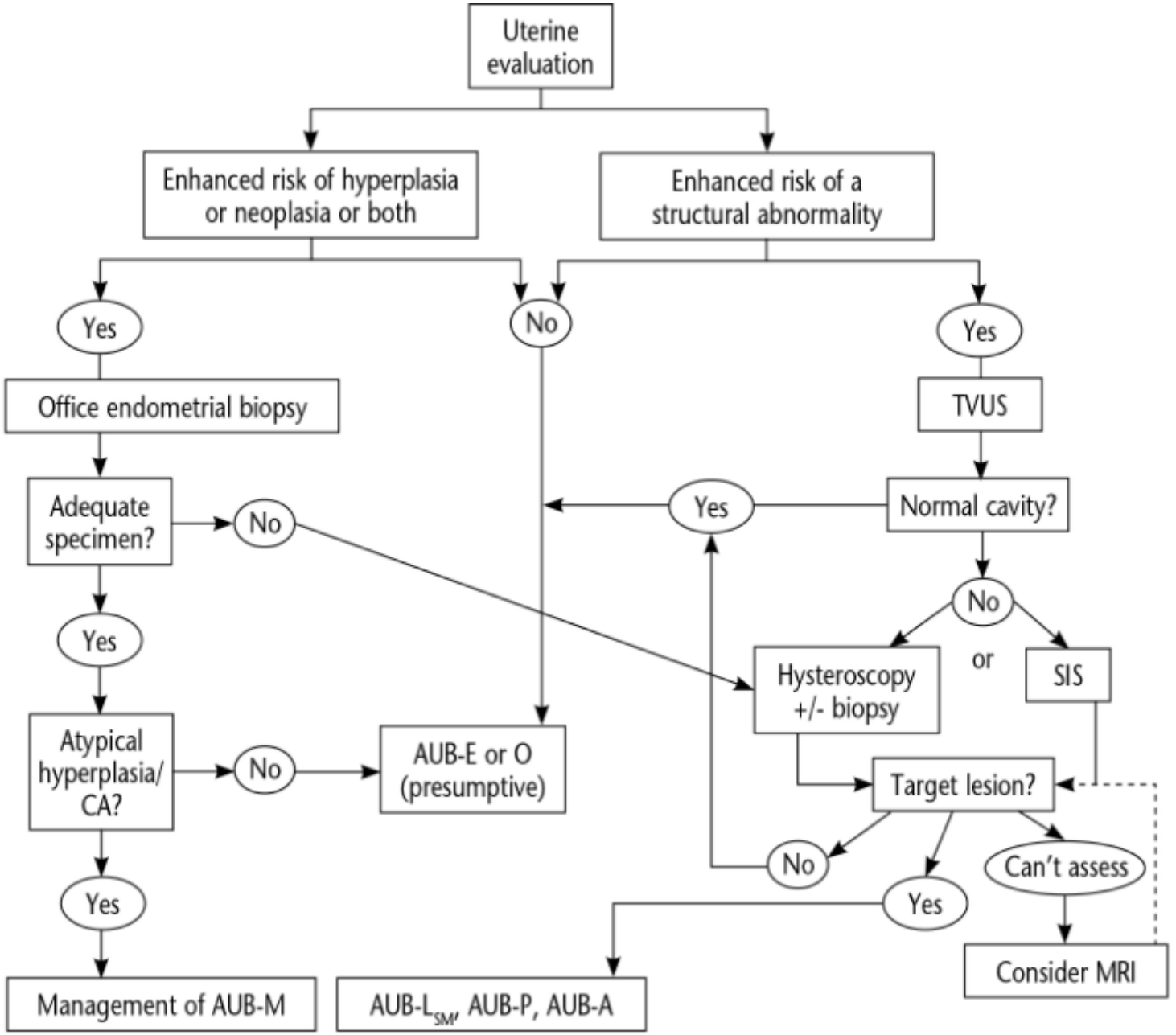
- 13-18
  - Persistent anovulation due to immaturity or dysregulation of HPO axis
  - May also be d/t hormonal contraceptive use, pregnancy, pelvic infection, coagulopathies or tumors
- 19-39
  - Pregnancy, structural lesions, anovulatory cycles (PCOS), hormonal contraception and endometrial hyperplasia.
- 40 to menopause
  - Anovulatory bleeding – normal physiology in response to declining ovarian function
  - Endometrial hyperplasia or carcinoma, atrophy or leiomyomas

WHEN TO REFER FOR AUB?

- Anytime!
- After initial work up
- Heavy menstrual bleeding
- Severe anemia
- Needs endometrial cavity assessment or biopsy
- After US with abnormal findings
- Persistent symptoms
- After failing medical management
- Desires definitive or surgical management
- Suspicion for malignancy

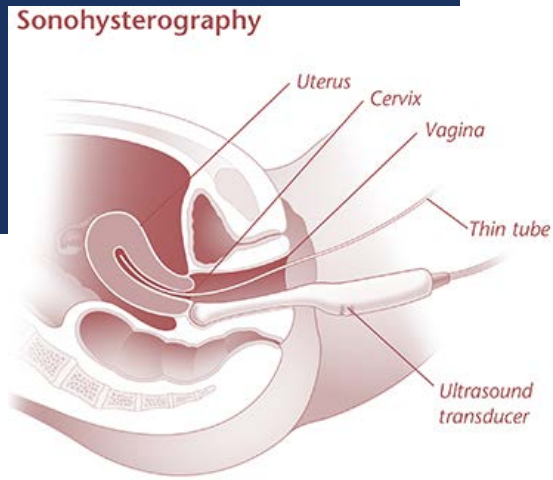
WHEN TO IMAGE?

- Literature is unclear as to when evaluation is indicated
  - Any abnormal physical exam – enlarged, irregular contour or globular uterus on exam
  - Persistent symptoms despite normal pelvic exam
- Decision to perform an imaging examination should be based on the clinical judgement of the provider with consideration of cost/benefit to patient
- Measurement of endometrial thickness in premenopausal women is not helpful in the evaluation of AUB



https://www.acog.org/clinical/clinical-guidance/practice-bulletin/articles/2012/07/diagnosis-of-abnormal-uterine-bleeding-in-reproductive-aged-women

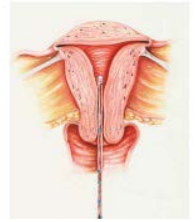
WHICH IMAGING MODALITY DO I CHOOSE?



- TVUS = transvaginal ultrasound
  - Useful screening test, helpful for evaluating the myometrium
- Saline sonohysterogram (SIS)
  - Superior in detecting intracavitary lesions such as polyps or submucosal leiomyomas
  - Only SIS can distinguish between focal vs. uniform thickening of the endometrium and structural abnormalities
  - Provides information on size and location of cavitary abnormalities
- MRI
  - Routine use is not recommended

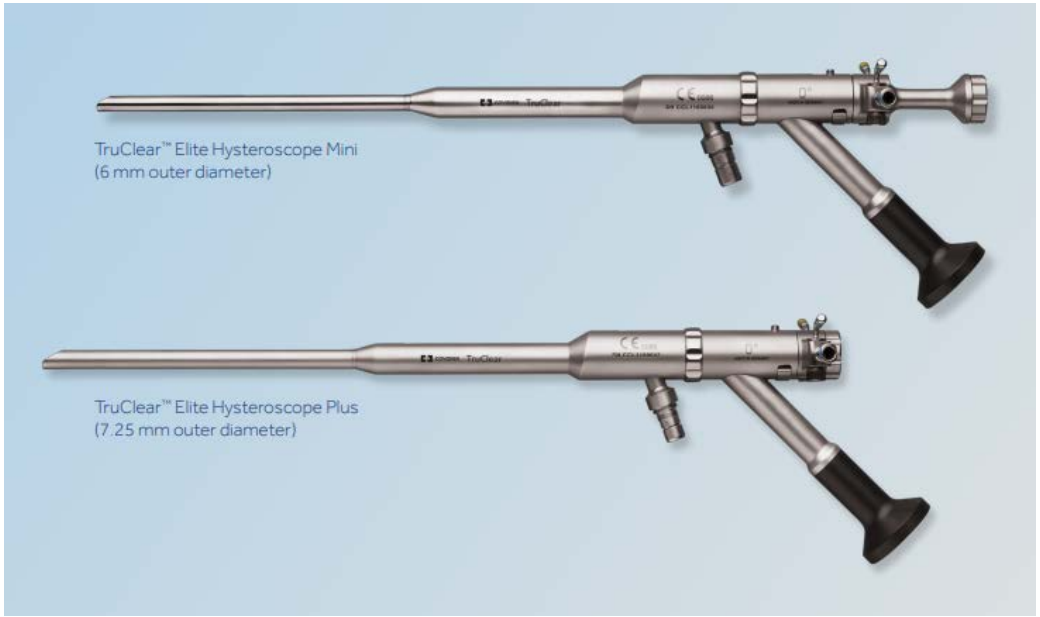
WHO TO REFER FOR ENDOMETRIAL BIOPSY?

- Patient who are older than 45 with AUB, first line test
- Also be considered in:
  - Patients younger than 45 with history of unopposed estrogen exposure (obesity of PCOS)
  - Failed medical management
  - Persistent AUB



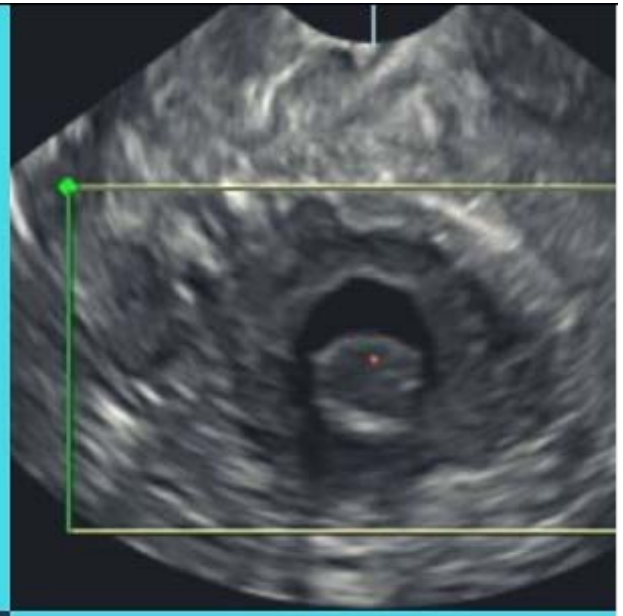
HYSTEROSCOPY

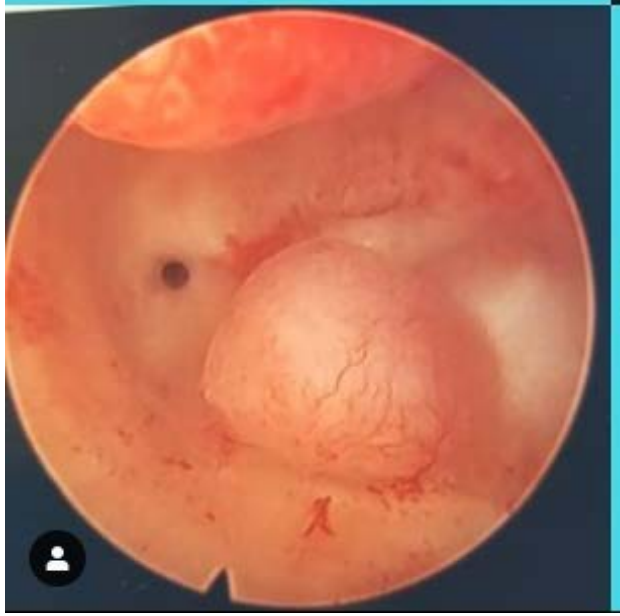
- In office or operating room
  - In office allows more convenience for the patient, less expensive and faster recovery for patient.
- Allows direct visualization of cavity and ability to take directed biopsies



ENDOMETRIAL POLYP

Work Up:
- H & P
-TVUS W/ SIS
-Endo Biopsy





Treatment:
Hysteroscopy &
Polypectomy

CHOOSING A TREATMENT

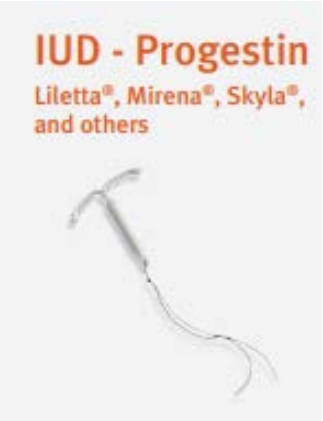
- Etiology
- Severity of bleeding (anemia, interfering with daily activities)
- Associated symptoms
- Infertility
- Reproductive desires – future fertility
- Medical co morbidities
- Underlying risk for VTE
- Patients preference – medical vs. surgical and/or short vs. long term

MANAGEMENT: MEDICAL

- NSAIDS
  - Naproxen
  - Mefenamic acid 500 mg TID
  - Ibuprofen 600 mg daily
- Tranexamic Acid (Lysteda)
  - 1.3 grams TID for up to five days during menstruation
  - Contraindicated with h/o VTE or current VTE

MANAGEMENT: HORMONAL

- Pills, patch, ring
  - Review patient's history with CDC MEC
  - Continuous vs. standard fashion
  - Estrogen progestin contraceptives
    - Junel
    - Oral Progestin
- Depo Provera
- Intrauterine Device
  - Progesterone only device – Mirena
    - 5 years for HMB
    - 6 years for contraception **Clinical Pearl – change of 8/20/2020**



CLINICAL PEARL: CDC MEDICAL ELIGIBILITY CRITERIA FOR CONTRACEPTION USE

Condition	Sub-Condition	Cu-IUD		LNG-IUD		Implant		DMPA		POP		CHC	
		I	C	I	C	I	C	I	C	I	C	I	C
Hypertension	a) Adequately controlled hypertension	1*		1*		1*		2*		1*		3*	
	b) Elevated blood pressure levels (*properly taken measurements*)												
	i) Systolic 140-159 or diastolic 90-99	1*		1*		1*		2*		1*		3*	
	ii) Systolic ≥160 or diastolic ≥100[‡]	1*		2*		2*		3*		2*		4*	
	c) Vascular disease	1*		2*		2*		3*		2*		4*	
Smoking	a) Age <35	1		1		1		1		1		2	
	b) Age ≥35, <15 cigarettes/day	1		1		1		1		1		3	
	c) Age ≥35, ≥15 cigarettes/day	1		1		1		1		1		4	
Headaches	a) Nonmigraine (mild or severe)	1		1		1		1		1		1*	
	b) Migraine												
	i) Without aura (includes menstrual migraine)	1		1		1		1		1		2*	
	ii) With aura	1		1		1		1		1		4*	

Key:	
1 No restriction (method can be used)	3 Theoretical or proven risks usually outweigh the advantages
2 Advantages generally outweigh theoretical or proven risks	4 Unacceptable health risk (method not to be used)

https://www.cdc.gov/reproductivehealth/contraception/mmwr/mec/summary.html

MANAGEMENT: SURGICAL

- Hysteroscopy
  - Dilation and curettage
  - Polypectomy
  - Myomectomy

Patients who have finished with childbearing:

- Endometrial ablation
- Uterine artery embolization
- Hysterectomy

CLINICAL PEARL: POST MENOPAUSAL BLEEDING

- Any vaginal/uterine bleeding after menopausal requires prompt evaluation to exclude or diagnose endometrial cancer or endometrial intraepithelial neoplasia (previously known as hyperplasia with atypia)
- History
- Physical Exam
- TVUS
  - Symptomatic
    - 4 mm or less: likely due to atrophy.
      - Greater than 99% negative predictive value for endometrial cancer
      - Persistent PMB, referral for endometrial biopsy
    - Greater than 4 mm, referral for endometrial biopsy
  - Asymptomatic/Incidental finding:
    - Lining 11 mm or greater, referral for endometrial biopsy

SUMMARY

- AUB is a common presentation for providers to diagnose and treat
- There are multiple different etiologies but PALM COEIN is a great place to start to work through the diagnosis
- Work up includes thorough history, physical and labs
- Imaging is dictated based on etiology
- OBGYN happy to help any step of the way

QUESTIONS?

Thank you for your time!