Update on Abnormal Uterine Bleeding

Susan M. Sheridan, M.D., F.A.C.O.G
Casper Obstetrical and Gynecological Associates
Casper, WY

Defining Abnormal Uterine Bleeding (AUB)

- Normal menstrual cycle
  - Frequency 21-35 days (1st day to 1st day)
  - Fairly regular intervals
  - Blood loss <80 ml (???)
    - Soaks pad or tampon in less than 2 hours AND/OR amount interferes with daily activities (work, stains clothing or bedding, leaving the house)
  - Duration of 5 days

Taking a Gynecologic History

- Menstrual history:
  - 1st and last day over several cycles, number of days of heavy/light menses, intermenstrual or postcoital bleeding, number of episode of bleeding over the past 12 months
- Sexual history:
  - Cervicitis or endometritis/PID
- Contraceptive history:
  - Iatrogenic bleeding (Paraguard-heavy, Mirena/Nexplanon-irregular or absent, OCPs-BTB)
- Family history:
  - Bleeding disorders, colon/gyn malignancy (Lynch/Cowden)

DEFINING AND CODING THE PROBLEM ICD-10

"AUB" paired with descriptor

- DENOTES PATTERN
  - Heavy menstrual bleeding (HMB)
  - Intermenstrual bleeding (IMB)

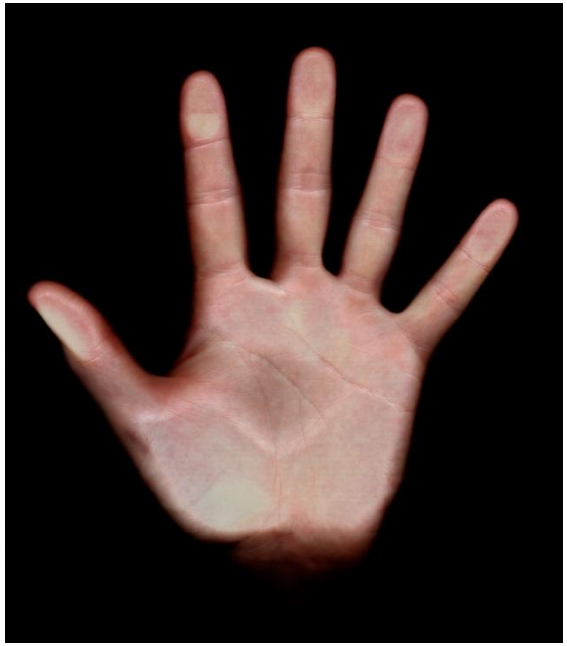
  (replaces menorrhagia and metromenorrhagia)

"AUB" with letter qualifier

- DENOTES CAUSE
  - (AUB-P): Polyps
  - (AUB-A): Adenomyosis
  - (AUB-L): Leiomyoma
    - SM or O
  - (AUB-M): Malignancy

Terminology (and DD)
Defines Pattern & Etiology

PALM



Polyps
Adenomyosis
Leiomyomas
Malignancy

COEIN

Coagulopathy
Ovulatory dysfxn
Endometrial
Iatrogenic
Not yet classified

DD by History

- Fibroids: heavy, prolonged bleeding
- Polyps: irregular/intermenstrual bleeding, Tamoxifen use, Lynch/Cowden, endometrial cells on Pap smear, obesity
- Adenomyosis: heavy, painful bleeding, dysparunia, uterine tenderness, on exam globular, soft uterus enlarged to less than 12 weeks size
- Malignancy: irregular, prolonged, sometimes heavy, does not respond to initial treatments, risk factors such as obesity, unopposed estrogen

DD by Hx/Cause

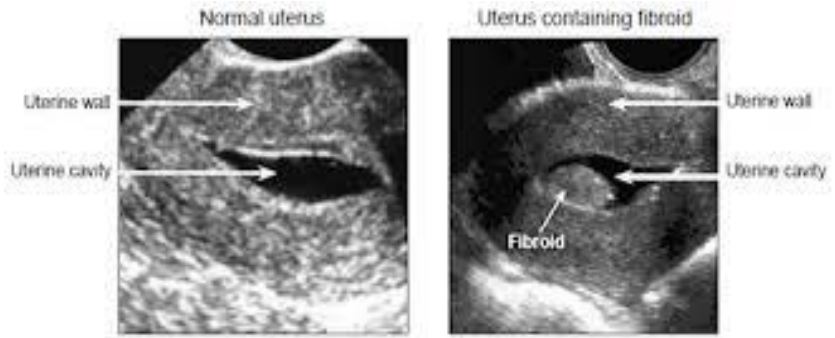
- Coagulopathy: family history, present since menarche, bleeding with procedures, not responsive to treatments (20% risk!)
- Ovulatory dysfunction: prolonged intervals of no bleeding, cycles length varies by more than 10 days, lack of molima, elevated androgens, hirsuitism
- Multifactorial: endometritis related to IUD, fibroids present with anovulatory cycles or malignancy

EVALUATION

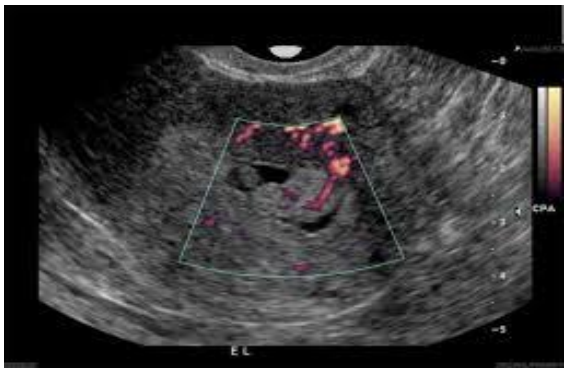
- **Labs**: Hgb/Hct, β-HCG, Pap, GC/Chlam, TSH, androgens, E/P
- **Ultrasound**: Abnormal exam, suspect pathology such as polyps/adenomyosis
  - Endometrial stripe only in PMB
- **Endometrial biopsy**:
  - Age greater than 45
  - Inadequate treatment response
  - Risk factors for malignancy or hyperplasia

Additional Tests

- Saline Infusion Sonohysterography (SIS)

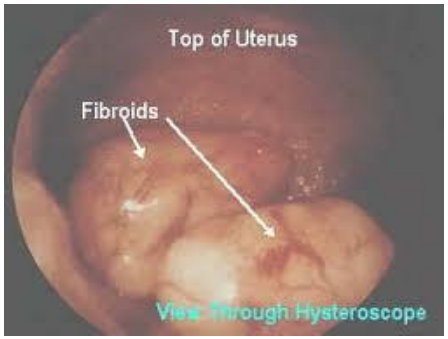


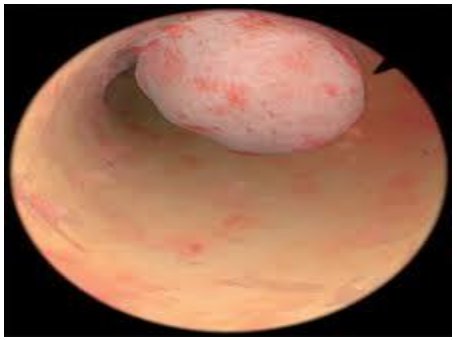
Images of sonohysterography. The uterine wall and saline in the uterine cavity are seen as black or "empty" space. A fibroid (benign tumor) is seen in the uterine cavity in the image on the right.

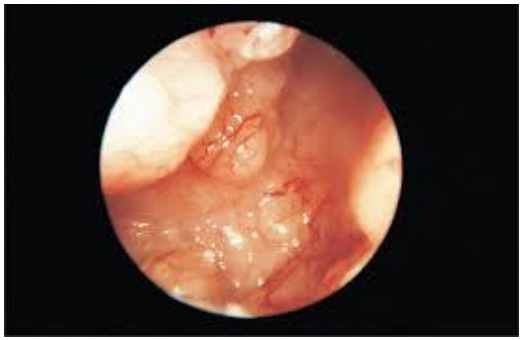


Preferrably between end of menses and day 8

- Hysteroscopy







Treatment

- Polyps: hysteroscopic resection
- Adenomyosis: hysterectomy, UAE
  - Hormones may improve in some women with COC continuous use
- Leiomyomas: hysteroscopic resection (requires additional imaging), GnRH agonist, UAE, hysterectomy
- Malignancy: surgical for cancer, medical high dose progestins for hyperplasia
  - 20% risk of cancer with atypia→surgical recommended

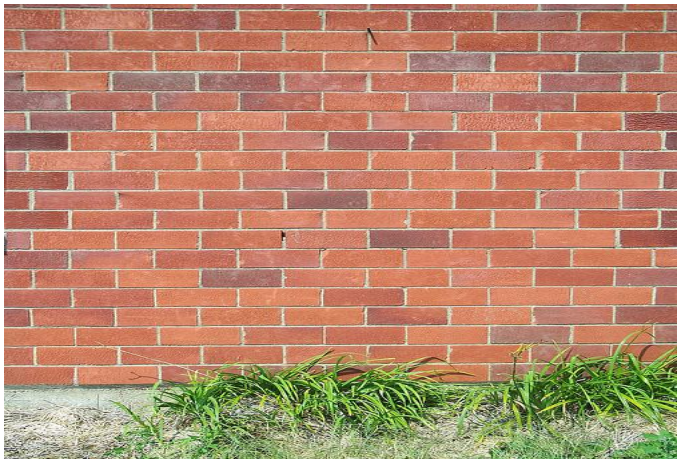
Treatment

- Coagulopathy:
  - treat underlying defect
- Ovulatory dysfunction:
  - stop acute bleeding (estrogen) and prevent recurrence:
    - Hormonal: Mirena/Skyla, Depo Provera, COCs, Nexplanon
    - metformin in PCOS-not recommended as sole treatment

Treatment

- Endometrial:
  - Medical:
    - NSAIDs
      - *Decrease in COX/endoperoxides →vasoconstriction of spiral arterioles and contraction of myometrial smooth muscle*
    - tranexamic acid (Lysteda) 1300 mg TID for up to 5 days during menses
      - *Anti-fibrinolytic: stabilizes fibrin plug by preventing plasmin from binding, lowers tPA level*
    - Mirena
      - *Pseudodecidualization, glandular atrophy, leukocytic infiltration, decrease glandlar to stromal mitosis*
  - Surgical:
    - Endometrial ablation: Novasure, Thermachoice

Endometrium and the Brick Wall Analogy



Normal endometrium

Simple hyperplasia

Complex hyperplasia <u>without</u> atypia

Complex hyperplasia <u>with</u> atypia