

# ENDOMETRIAL BIOPSY

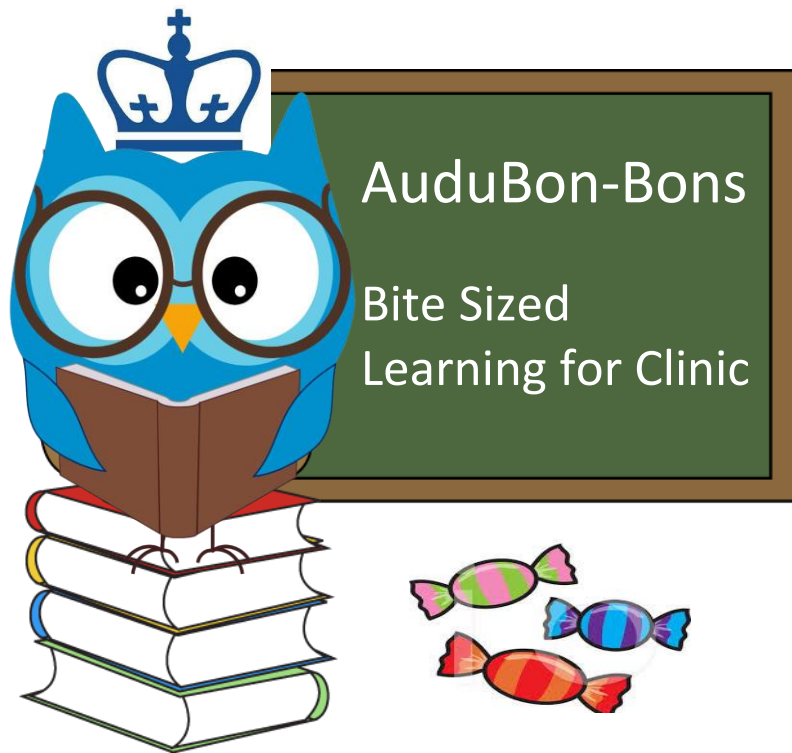
Week 32

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SDH and .phrase slides by Chloé Altchek,  
MS4

## Reading Assignment:

Watch the following short videos:

[https://www.youtube.com/watch?v=EGMDDcMYZJw&list=PLsnlxcYW8\\_72rbKPRcedNhHad57UAekBH&index=4&t=0s&has\\_verified=1](https://www.youtube.com/watch?v=EGMDDcMYZJw&list=PLsnlxcYW8_72rbKPRcedNhHad57UAekBH&index=4&t=0s&has_verified=1)



# LEARNING OBJECTIVES



- To understand when an endometrial biopsy is indicated
- To feel comfortable counseling a patient on risks, benefits and alternatives to endometrial biopsy
- To review technical issues regarding performing an endometrial biopsy



# CASE VIGNETTE

- Ms. Dulce Buho, a 57 y.o. G3P3 woman, presents to clinic for a well woman exam.
  - She reports her LMP was at age 53
  - Upon performing a review of systems she admits to having 3 episodes of vaginal spotting over the past 3-4 months.



# FOCUSED HISTORY

What elements of this patient's history are most relevant?

- **PMH:** HTN
- **PSH:** Laparoscopic cholecystectomy
- **POBH:** FT NSVD x 3
- **PGYNH:** No menses in ~ 4 years  
SA with her husband only
- **MEDS:** HCTZ
- **ALL:** NKDA



# PERTINENT PHYSICAL EXAM FINDINGS

**What elements of this patient's physical exam are most relevant?**

- **Vulva:** Normal external female genitalia. No lesions.
- **Vagina:** Atrophic vaginal tissue. No discharge.
- **Cervix:** Parous os. No lesions. No discharge. No CMT.
- **Uterus:** NT. Anteverted. Not enlarged.
- **Adnexa:** NT. No masses palpable.



# INDICATIONS

## What is the primary role of endometrial sampling?

- Determine whether **carcinoma** or **pre-malignant lesions** are present

## Which patients warrant endometrial sampling?

- Evaluation of **postmenopausal bleeding**
- Evaluation of **abnormal uterine bleeding > 45 y.o.**
- Evaluation of **abnormal uterine bleeding < 45 y.o. and**
  - History of unopposed estrogen exposure (obesity, PCOS)
  - Failed medical management
  - Persistent AUB
- Evaluation of **abnormal endometrial cells found on Pap smear**



# CONTRAINDICATIONS - Relative and Absolute

- Presence of a viable and desired pregnancy
- Bleeding diathesis
- Presence of acute vaginal, cervical or pelvic infection
- An obstructing cervical lesion



# INFORMED CONSENT

**What will you discuss with the patient before signing the consent form?**

- **RISKS:** Bleeding, infection, perforation, discomfort during procedure, failure to diagnose endometrial pathology
- **BENEFITS:** May be performed without anesthesia, less invasive, safe, less expensive than hysteroscopy
- **ALTERNATIVES:** More invasive methods of sampling (ie hysteroscopy)





# BENEFITS VS PITFALLS

## What factors influence the sensitivity of office endometrial biopsy?

- Focal vs diffuse lesion
  - If cancer occupies < 50% of surface area, the cancer can be missed by blind biopsy
- Pathologic diagnosis
  - Intracavitary leiomyoma, polyp
- Presence of uterine malformation
- Surface area of the endometrial cavity
- PPV > NPV
  - Positive result  $\square$  posttest probability of endometrial cancer 83%
  - Negative result  $\square$  posttest probability of endometrial cancer 0.9%
- Sensitivity = 68 – 78%, Sampling failure = 0 – 54%

## Limitation

- Samples ~ 4% (0 – 12%) of the endometrium



# PRE-PROCEDURE CONSIDERATIONS

**The MA asks what instruments/ supplies you will need in the room before you begin.**

- Chux
- Sterile speculum
- Antiseptic solution (povidone-iodine or chlorhexidine)
- Fox swabs
- Sterile gloves
- Single tooth tenaculum
- Uterine sound
- Sterile endometrial pipelle
- Silver nitrate sticks



# PROCEDURE

## Describe the steps of the procedure:

- Negative pregnancy test
- Conduct a NYP time-out
- Perform a bimanual exam to determine position of uterus
- Introduce a sterile speculum
- Cleanse the cervix with betadine (using non-sterile gloves)
- Don sterile gloves
- Apply a single tooth tenaculum to the cervix
- Sound the uterus
- Insert the endometrial pipelle, withdraw the stylette to achieve a slight vacuum.  
Obtain a sample of the endometrium with one or two passes using a corkscrew rotation combined with repeating cephalic-caudal motion while maintaining suction.
- Deposit the sample into pathology sample jar
- Remove tenaculum
- Ensure hemostasis at tenaculum site using pressure or silver nitrate

# FOLLOW UP

- Assess the patient for comfort and stability. Observe for signs of vasovagal reaction
- Instruct pelvic rest for 1 – 2 days
- Advise patient to return for fever/chills, severe abdominal cramping, syncope, unusually heavy vaginal bleeding, foul smelling vaginal discharge
- Advise patient to return to clinic in 1 – 2 weeks for results



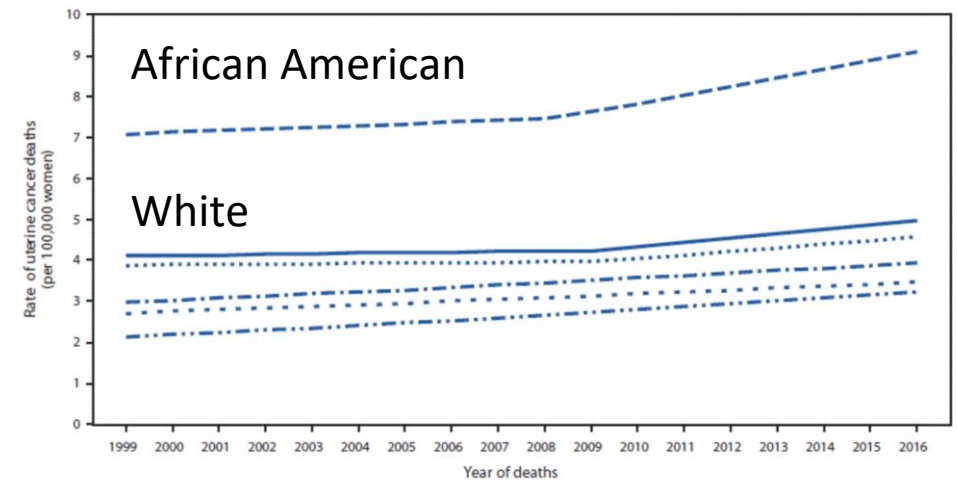
# SOCIAL DETERMINANTS OF HEALTH

Black women are approximately **twice as likely to die from uterine cancer** as women in other racial/ethnic groups

**Black women are 2x more likely to be diagnosed with distant stage uterine cancer** than women of other racial/ethnic groups for each histologic type

Black women are more likely to have aggressive histologic types than other women, including carcinosarcomas, and sarcomas

**Uterine cancer death rates, by racial/ethnic group<sup>s</sup> — United States, 1999–2016**



Source: CDC's National Center for Health Statistics National Vital Statistics System.

Improving access to health care among low-SES women to facilitate earlier diagnosis and optimal treatment may serve to diminish the racial/ethnic difference in endometrial cancer survival.



# Epic .phrase

## **BBonEndometrialBxCounseling**

### Description: Endometrial biopsy counseling and consent

Given the presence of [AUB, post-menopausal bleeding, abnormal endometrial cells on PAP smear, results of transvaginal ultrasound], the need for endometrial biopsy to determine whether carcinoma or premalignant lesions are present was discussed with the patient. The major risks of the procedure were outlined, including bleeding, infection, perforation, discomfort during procedure, and failure to diagnose endometrial pathology. We also discussed the alternatives, including hysteroscopy and the benefits of endometrial biopsy relative to hysteroscopy given that it is cheaper, carries fewer risks, is less invasiveness and does not require anesthesia. The patient was briefed on the steps of the procedure. Education on follow up instructions was provided including the need for pelvic rest for 1 – 2 days, and that the patient should return for fever/chills, severe abdominal cramping, syncope, unusually heavy vaginal bleeding, and/or foul smelling vaginal discharge. The patient was told to schedule a follow up appointment for 1 – 2 weeks from the procedure date to discuss the results. All questions were answered.

## **BBonEndometrialBxProcedure**

### Description: Endometrial biopsy procedure

Negative pregnancy test confirmed. Time out performed. Position of the uterus determined using bimanual exam. Speculum inserted and the cervix was visualized. Cervix prepped with \*\*\*betadine/chlorhexidine solution. ]Pipelle was inserted into the uterine cavity and a sample of the endometrium was obtained. \*\*\* passes yielded a sufficient amount of endometrial tissue for evaluation. . \*\*\*

The patient tolerated the procedure well.

Specimens Sent: endometrial sampling

Estimated Blood Loss: minimal



# CODING AND BILLING

- Diagnostic Codes (ICD-10)
  - N93.9 AUB
  - N95 PMB
- CPT Code
  - 58100 Endometrial biopsy



# EVIDENCE

- Diagnosis of abnormal uterine bleeding in reproductive-aged women. Practice Bulletin No. 128. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2012;120:197–206.
- Endometrial sampling procedures. UpToDate. (Accessed January 21, 2020).
- Management of abnormal uterine bleeding associated with ovulatory dysfunction. Practice Bulletin No. 136. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2013;122:176–85.
- Management of acute abnormal uterine bleeding in nonpregnant reproductive-aged women. Committee Opinion No. 557. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2013; 121:891–6.
- The role of transvaginal ultrasonography in evaluating the endometrium of women with postmenopausal bleeding. ACOG Committee Opinion No. 734. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2018;131:e124–9.
- Henley SJ, Miller JW, Dowling NF, Benard VB, Richardson LC. Uterine Cancer Incidence and Mortality — United States, 1999–2016. *MMWR Morb Mortal Wkly Rep* 2018;67:1333–1338. DOI: <http://dx.doi.org/10.15585/mmwr.mm6748a1external> icon.

