Women's Health – ACP Internal Medicine Board Review

- Nina Tan, MD
- ninat@uw.edu
- University of Washington Ob/Gyn and Primary Care Clinic

Key Topics

Know:

- Screening and Prevention recommendations based on age
- Impacts of pregnancy complications on subsequent health

Evaluate and manage:

- Breast Lesions
- Absent or abnormal bleeding
- Contraception
- Menopause

Recommendations apply to people assigned female at birth

Screening

Case

32-year-old woman with no past medical history presents for a wellness exam. She has never smoked, rarely drinks alcohol, is sexually active with 1 monogamous male partner for five years and uses a levonorgestrel IUD for contraception. She had negative STI testing 2 years ago. Her last cervical cancer screening was at 29 years old and was NILM (negative for intraepithelial lesion or malignancy) with no HPV testing. Her maternal grandmother had breast cancer at 70 years old.

What screening is advised for today?

A. Screening mammography
B. GC/CT Testing
C. Cervical cancer screening
D. Clinical breast exam

Case

32-year-old woman with no past medical history presents for a wellness exam. She has never smoked, rarely drinks alcohol, is sexually active with 1 monogamous male partner for five years and uses a levonorgestrel IUD for contraception. She had negative STI testing 2 years ago. Her last cervical cancer screening was at 29 years old and was NILM (negative for intraepithelial lesion or malignancy) with no HPV testing. Her maternal grandmother had breast cancer at 70 years old.

What screening is advised for today?

A- Screening mammography
- Starting at 40 years old

B- GC/CT Testing
- Women ≤ 24 years old or 25+ at higher risk

C- Cervical cancer screening
- Q 5 years after 30 yo if using HPV primary screening or cotest

D- Clinical breast exam
- Insufficient evidence (USPSTF), recommend against (ACS)

Key Topic: Cervical Cancer Screening – Average Risk

When to start screening?

- No later than 25 years old
  - 21 yo (USPSTF/ACOG)
  - 25 yo (ACS)

Key Topic: Cervical Cancer Screening Recommendations for Specific Populations

If immunosuppressed:

- H/o HIV infection or AIDS
- Systemic lupus erythematosus
- While taking immunosuppressive medications (eg: h/o transplant, IBD, rheumatoid arthritis, multiple sclerosis etc…)

ASCCP

21 - 29 years old	**≥ 30 years old – lifetime**
Annual cytology. If 3 consecutive negative results >> q3 years	Co-test every 3 years preferred Cytology annually. If 3 consecutive negative results >> q3 years

Key Topic: Cervical Cancer Screening Recommendations for Specific Populations

If immunosuppressed:

- H/o HIV infection or AIDS
- Systemic lupus erythematosus
- While taking immunosuppressive medications (eg: h/o transplant, IBD, rheumatoid arthritis, multiple sclerosis etc…)

ASCCP

21 - 29 years old	**≥ 30 years old – lifetime**
Annual cytology. If 3 consecutive negative results >> q3 years	Co-test every 3 years preferred Cytology annually. If 3 consecutive negative results >> q3 years

If DES exposure in utero:

- Annual cytology screening due to the increased risk of clear cell adenocarcinoma

Back to the case

32-year-old woman with no past medical history presents for a wellness exam. Her last cervical cancer screening was at 29 years old and was NILM (negative for intraepithelial lesion or malignancy) with no HPV testing.

Which cervical cancer screening test would you recommend?

HPV primary testing with reflex cytology (preferred)

Co- test, self-test in clinic, or cytology alone also acceptable

Case: A 42-year-old woman presents for a wellness exam. Her mother was diagnosed with breast cancer at 67 and her only maternal aunt had ovarian cancer at age 71. Her last screening mammogram was 2 years ago and was normal. She asks when she should have her next mammogram and whether she needs additional breast imaging given her family history. What is the most appropriate next step?

A) Recommend annual screening mammograms
C) Offer breast ultrasound in addition to screening mammogram
D) Order screening breast MRI in addition to screening mammogram
E) Assess breast cancer risk using a familial risk assessment tool and consider genetic counseling referral
(USPSTF 2019, Grade B, update in progress)

Case: A 42-year-old woman presents for a wellness exam. Her mother was diagnosed with breast cancer at 67 and her only maternal aunt had ovarian cancer at age 71. Her last screening mammogram was 2 years ago and was normal. She asks when she should have her next mammogram and whether she needs additional breast imaging given her family history. What is the most appropriate next step?

A) Recommend annual screening mammograms
C) Offer breast ultrasound in addition to screening mammogram
D) Order screening breast MRI in addition to screening mammogram
E) Assess breast cancer risk using a familial risk assessment tool and consider genetic counseling referral
(USPSTF 2019, Grade B, update in progress)

Risk factors for breast cancer

- Family history of breast or ovarian cancer
- Personal history of atypical ductal hyperplasia or atypical lobular hyperplasia of the breast
- Known hereditary mutation (eg: BRCA1/2, PALB2 etc…)
- History of chest radiation therapy in childhood or adolescence

Others: dense breast tissue, nulliparity, elevated post-menopausal BMI, sedentary lifestyle, alcohol use, early menarche, late menopause, hormonal contraception use etc…

Key Topic: Breast cancer screening

Determined by familial risk assessment

Average risk:

Screening mammograms

every other year
between 40 -74 yo

(USPSTF Grade B)

High risk (>20% lifetime risk):

Annual screening mammogram and screening breast MRI (ACS, NCCN)

Offer risk reducing medications if ≥ 35 yo (USPSTF Grade B)

Key Topic: Breast cancer screening

Determined by familial risk assessment

Average risk:

Screening mammograms

every other year
between 40 -74 yo

(USPSTF Grade B)

High risk (>20% lifetime risk):

Annual screening mammogram and screening breast MRI (ACS, NCCN)

Offer risk reducing medications if ≥ 35 yo (USPSTF Grade B)

Insufficient evidence to recommend for or against supplemental screening for dense breast tissue (USPSTF)

Abnormal uterine bleeding (AUB)

Case: A 26-year-old woman presents with menstrual cycles every 45–90 days, moderate acne, and hirsutism which she finds bothersome. Prior labs showed an elevated free testosterone level and normal TSH, prolactin, and 17-hydroxyprogesterone levels. Her BMI is 32 and fasting glucose is 108. She does not desire pregnancy. In addition to lifestyle modification, which of the following is the most appropriate initial pharmacologic therapy?

A. Metformin alone

B. Spironolactone alone

C. Combined oral contraceptive pill

D. Progesterone only contraceptive pill

PMOS (formerly PCOS)

Case: A 2[illegible]year-old woman presents with menstrual cycles every 45–90 [illegible]derate acne, and hirsutism which she finds bothersome. [illegible]wed an elevated free testosterone level and normal TSH, [illegible]tin, and 17-hydroxyprogesterone levels. Her BMI is 32 and fasting glucose is 108. She does not desire pregnancy. In addition to lifestyle modification, which of the following is the most appropriate initial pharmacologic therapy?

A. Metformin alone — May be helpful for hyperandrogenism and menstrual irregularity but not a first line medication, especially as monotherapy. Does help with insulin resistance. Not contraception, no endometrial protection.

B. Spironolactone alone — May worsen acne and does not treat hirsutism.

C. Combined oral contraceptive pill — Addresses hyperandrogenic symptoms, menstrual irregularity, and contraception. No contraindications

D. Levonorgestrel IUD — May worsen acne and does not treat hirsutism.

~~PCOS~~ Polyendocrine Metabolic Ovarian Syndrome

Presentation	Diagnosis	Other considerations
• Oligo/anovulation • Infertility • Hyperandrogenism • Metabolic syndrome • Differentiate from virilization		

PMOS treatment

Endometrial protection	Androgen excess	Infertility
• Combined OCPs • Hormonal IUD • Progestins or progesterone	• Combined OCPs • Spironolactone • Finasteride • Topical creams (eflornithine), laser therapy	• Weight loss • Metformin • Letrozole • Clomiphene citrate

Case: A 48-year-old nulliparous woman presents with a 5-month history of heavy vaginal bleeding every 2–6 weeks, sometimes lasting up to 2 weeks. She has no history of bleeding disorders. Her BMI is 38. She has hypertension, type 2 diabetes, and a history of PMOS. Pelvic ultrasound shows an endometrial stripe of 10 mm. Her last Pap smear was normal at 45 yo. Which of the following is the most appropriate next step?

A. Reassure her that irregular bleeding is expected during perimenopause
B) Recommend a combined OCP to regulate menstrual cycles
C) Recommend an endometrial biopsy
D) Recommend high dose NSAIDs for management of heavy menstrual bleeding

Case: A 48-year-old **nulliparous** woman presents with a 5-month history of **heavy vaginal bleeding every 2–6 weeks, sometimes lasting up to 2 weeks**. She has no history of bleeding disorders. Her **BMI is 38**. She has hypertension, **type 2 diabetes, and a history of PMOS**. Pelvic ultrasound shows an **endometrial stripe of 10 mm**. Her last Pap smear was normal at 45 yo. Which of the following is the most appropriate next step?

A. Reassure her that irregular bleeding is expected during perimenopause
B) Recommend a combined OCP to regulate menstrual cycles
C) Recommend an endometrial biopsy
D) Recommend high dose NSAIDs for management of heavy menstrual bleeding

Need to rule out endometrial hyperplasia or cancer

Key Point: when to rule out endometrial cancer

Post-menopausal women with any uterine bleeding

Under 45 yo with h/o unopposed estrogen eg: PMOS, BMI ≥ 30, or h/o tamoxifen, or persistent/refractory abnormal bleeding

≥ 45 yo with bleeding that is newly frequent, heavy or prolonged

Framework for Causes of AUB

STRUCTURAL

Polyp
Adenomyosis
Leiomyoma
Malignancy & hyperplasia

NON -STRUCTURAL

Coagulopathy
Ovulatory dysfunction
Endometrial
Iatrogenic
Not otherwise classified

FIGO 2018

Amenorrhea/ Oligomenorrhea ddx

Hypothalamus

- *Stress, eating disorders, exercise*

Pituitary

- *Sheehan's, Prolactinoma, Prolactinemia (breast feeding, antipsychotics)*

Ovary

- *PMOS, Primary Ovarian Insufficiency, Menopause*

Uterus

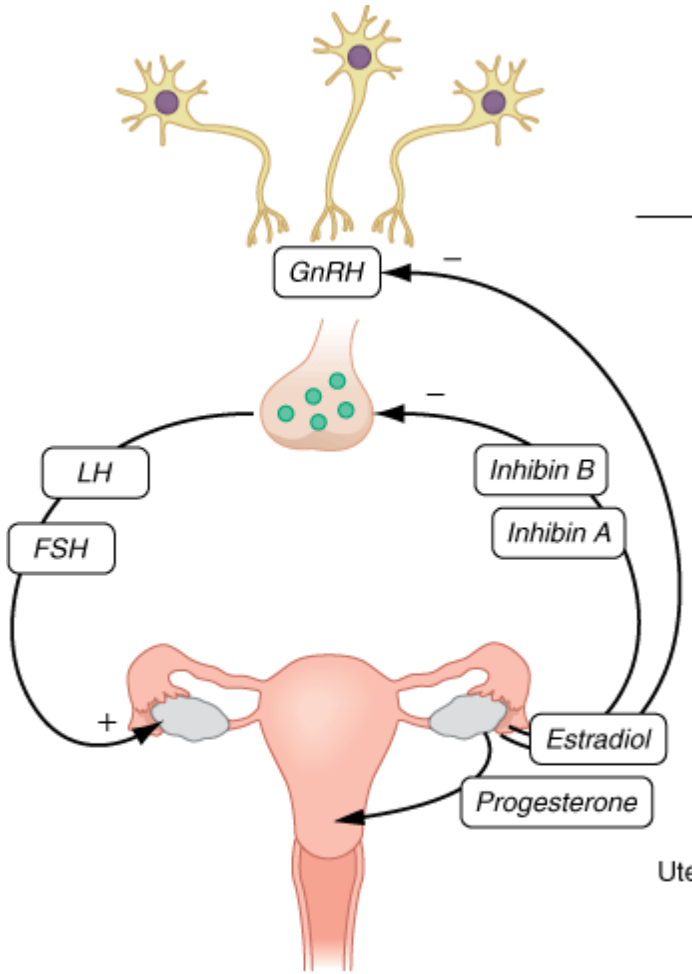
- *Asherman's/scarring, Pregnancy*

Vagina

- *Anatomic obstruction*

Other

- *Thyroid abnormalities*
- *Non-classic Congenital Adrenal Hyperplasia*



	Primary	Secondary
Hypothalamus	27%	36%
Pituitary	2%	15%
PCOS	7%	30%
Ovary	43%	12%
Uterus/outflow tract	19%	7%

Source: Fauci AS, Kasper DL, Braunwald E, Hauser SL, Longo DL, Jameson JL, Loscalzo J: *Harrison's Principles of Internal Medicine*, 17th Edition: http://www.accessmedicine.com

Copyright © The McGraw-Hill Companies, Inc. All rights reserved.

Slide from Addie McClintock, MD

Key Point: Evaluation of AUB

Lab workup

- Pregnancy test
- STI testing if indicated
- Heavy or more frequent bleeding: TSH, bleeding disorder workup, PMOS workup, CBC + iron studies
- Less frequent or no bleeding: TSH, prolactin, consider FSH and estradiol if concern for primary ovarian insufficiency (high FSH, low estradiol)

Key Point: Evaluation of AUB

Lab workup

- Pregnancy test
- STI testing if indicated
- Heavy or more frequent bleeding: TSH, bleeding disorder workup, PMOS workup, CBC + iron studies
- Less frequent or no bleeding: TSH, prolactin, consider FSH and estradiol if concern for primary ovarian insufficiency (high FSH, low estradiol)

Review medication list

Hormonal contraception

Anti-psychotics (eg: risperidone)

Anticoagulation

Tamoxifen (risk of endometrial cancer)

Exam and Studies

Pelvic exam, cervical cancer screening

Low threshold for pelvic ultrasound

Endometrial biopsy if indicated

Key Point: Management of AUB

Heavy menstrual bleeding:

- High dose NSAIDS
- Progestin (oral, IUD, DMPA)
- Combined oral contraceptives (assess for contraindications to estrogen)
- Tranexamic acid ($$, increased clot risk)
- Procedural or surgical intervention

Oligo- or amenorrhea:

- Treat the underlying cause
- If POI – full replacement dose estrogen + progesterone
- If functional hypothalamic amenorrhea - increase calories, improve nutrition, decrease exercise, consider transdermal estradiol + oral progesterone

Preconception care, chronic disease and pregnancy

Case: 34-year-old G2P1 woman with a history of type 1 diabetes mellitus presents for preconception counseling. Her last hemoglobin A1c was 8.2%. Her previous pregnancy was complicated by fetal macrosomia and shoulder dystocia. She is currently taking insulin glargine and insulin lispro.
Which of the following is the most significant maternal risk if she becomes pregnant now?

A. Hyperemesis gravidarum
B. Preeclampsia
C. Cervical insufficiency
D. Placenta previa

Case from Addie McClintock, MD

Case: 34-year-old G2P1 woman with a history of type 1 diabetes mellitus presents for preconception counseling. Her last hemoglobin A1c was 8.2%. Her previous pregnancy was complicated by fetal macrosomia and shoulder dystocia. She is currently taking insulin glargine and insulin lispro.
Which of the following is the most significant maternal risk if she becomes pregnant now?

A. Hyperemesis gravidarum
B. Preeclampsia
C. Cervical insufficiency
E. Placenta previa

Case from Addie McClintock, MD

Recognize importance of management of medical disease prior to pregnancy

Pregestational diabetes, especially if poorly managed, increases maternal risk including:

- Preeclampsia due to underlying vascular dysfunction
- Worsening retinopathy, nephropathy, or hypertensive disorders
- C-section delivery (due to fetal macrosomia)

Fetal risks include:

- Congenital malformations (eg: cardiac, neural tube, MSK, cleft palate)
- Polyhydramnios and preterm labor/delivery, macrosomia
- Respiratory distress syndrome

Good glycemic control around conception and during pregnancy reduces risks. Target A1C <6.5% at conception

Case: A 28-year-old woman at 9 weeks gestation presents for a prenatal visit. She was diagnosed with hypothyroidism 2 years ago and takes levothyroxine 75 mcg daily. Her TSH prior to pregnancy was 1.8 mIU/L. Today her TSH is 4.9 mIU/L (normal non-pregnant reference range 0.4–4.0 mIU/L). She feels well and denies symptoms of hypothyroidism. Which of the following is the most appropriate management?

A) Increase levothyroxine dose by 25–30%, recheck TSH in 4 weeks
B) Recheck TSH in the third trimester and adjust levothyroxine dose
C) Refer to endocrinology before making medication changes
D) No further thyroid function monitoring needed

Case: A 28-year-old woman at 9 weeks gestation presents for a prenatal visit. She was diagnosed with hypothyroidism 2 years ago and takes levothyroxine 75 mcg daily. Her TSH prior to pregnancy was 1.8 mIU/L. Today her TSH is 4.9 mIU/L (normal non-pregnant reference range 0.4–4.0 mIU/L). She feels well and denies symptoms of hypothyroidism. Which of the following is the most appropriate management?

A) Increase levothyroxine dose by 25–30%, recheck TSH in 4 weeks. Target TSH 0.2-<2.5 mU/L in the first trimester
B) Recheck TSH in the third trimester and adjust levothyroxine dose
C) Refer to endocrinology before making medication changes
D) No further thyroid function monitoring needed

Case: 36-year-old woman with HTN and T2DM here for blood pressure follow up. She hopes to become pregnant and would like to stop her oral contraceptive. She does not smoke, drink, or use drugs. Medications are cOCP, lisinopril, metformin, sertraline and acetaminophen as needed. Exam is unremarkable with normal vitals. You recommend starting folic acid, which of the following medications should be stopped at this time?

A. Metformin
B. Lisinopril
C. Sertraline
D. Acetaminophen

Case: 36-year-old woman with HTN and T2DM here for blood pressure follow up. She hopes to become pregnant and would like to stop her oral contraceptive. She does not smoke, drink, or use drugs. Medications are cOCP, lisinopril, metformin, sertraline and acetaminophen as needed. Exam is unremarkable with normal vitals. You recommend starting folic acid, which of the following medications should be stopped at this time?

A. Metformin
B. Lisinopril
C. Sertraline
D. Acetaminophen

Key Point: Medication safety in pregnancy

Safe to use in pregnancy

PREGNANCY	LACTATION
First Line	**First Line**
Nifedipine	Nifedipine
Labetalol	Amlodipine
	Enalapril
	Labetalol
Second Line/Alternatives	**Second Line/Alternatives**
Amlodipine	Metoprolol
Metoprolol	Carvedilol
Carvedilol	Benazepril
Hydralazine	Captopril
Methyldopa	Hydralazine
Hydrochlorothiazide	Spironolactone
	Hydrochlorothiazide
	Methyldopa

- Metformin, insulin
- SSRIs (sertraline preferred)
- Acetaminophen

Avoid or do not use in pregnancy

PREGNANCY	LACTATION
Use With Caution	**Use With Caution**
Verapamil	Verapamil
Diltiazem	Diltiazem
Clonidine	Clonidine
Insufficient Evidence	**Insufficient Evidence**
Nitrates	Nitrates
Eplerenone	Sacubitril/valsartan
	Other ACEis and ARBs
	Eplerenone
Contraindicated	**Avoid**
ACEis	Atenolol
ARBs	Chlorthalidone
Sacubitril/valsartan	
Spironolactone	
Atenolol	
Chlorthalidone	

- NSAIDs (20+ weeks gestation)
- Warfarin
- Valproic Acid, lithium
- Accutane/Retinoids

American College of Cardiology Expert Analysis July 2026

Pregnancy Associated Cardiovascular Disease Risks

Case: A 45-year-old woman with PMH notable for gestational diabetes and preeclampsia. She is otherwise healthy with no h/o tobacco use. Exam: BP 122/80, BMI 27. Labs from 2 years ago show A1C 5.2 and normal lipid panel. PREVENT ASCVD 10 yr risk score is 0.9%. In addition to standard recommendations regarding healthy lifestyle, what else do you recommend today?

A. Statin use for cardiovascular risk reduction
B. Coronary artery calcium score
C. A1C and lipid panel at least every 2 years
D. Daily aspirin use
E. No additional recommendations

Case: A 45-year-old woman with PMH notable for gestational diabetes and preeclampsia. She is otherwise healthy with no h/o tobacco use. Exam: BP 122/80, BMI 27. Labs from 2 years ago show A1C 5.2 and normal lipid panel. PREVENT ASCVD 10 yr risk score is 0.9%. In addition to standard recommendations regarding healthy lifestyle, what else do you recommend today?

A. Statin use for cardiovascular risk reduction
B. Coronary artery calcium score
C. A1C and lipid panel at least every 2 years
D. Daily aspirin use
E. No additional recommendations

KEY POINT: Elevated lifetime cardiovascular risk in women with pregnancy–related metabolic or hypertensive disorders

- Gestational DM, gestational HTN and preeclampsia are independent CV risk-enhancing factors
  - H/o preeclampsia – 2-fold increased risk of future CV disease
  - H/o gestational diabetes - 35–60% likelihood of developing type 2 diabetes within 10–20 years

- These are not included on CV risk calculators

- Requires more frequent metabolic evaluation compared to general population

AHA Scientific Statement (2021): "Identifying and Treating CVD Risk in Women with Adverse Pregnancy Outcomes"

“4th trimester” and beyond

- Screen for postpartum depression
  - Edinburgh Postnatal Depression Scale - score of 11 or higher
  - PHQ9
- Monitor blood pressure
- Ask about pregnancy complications
  - If gestational diabetes – A1C every 1-3 years
  - If hypertensive disease of pregnancy – CVD risk enhancer
- Support lactation
- Contraception

Contraception

Case: 37-year-old woman here to discuss contraceptive options. She is married and has a 1-year-old child. She says that her child was a “surprise” because she had a hard time remembering to take her combined OCP. Periods are regular, heavy, and with cramping.
PMH: none
SH: Smokes a pack of cigarettes daily.
Urine pregnancy test negative today in clinic.
Which of the following is the most appropriate contraceptive option for this patient?

A. Continue the combined oral contraceptive

B. Copper IUD

C. Levonorgestrel IUD

D. Progesterone-only pill

Case: 37-year-old woman here to discuss contraceptive options. She is married and has a 1-year-old child. She says that her child was a “surprise” because she had a hard time remembering to take her combined OCP. Periods are regular, heavy, and with cramping.
PMH: none
SH: Smokes a pack of cigarettes daily.
Urine pregnancy test negative today in clinic.
Which of the following is the most appropriate contraceptive option for this patient?

A. Continue the combined oral contraceptive – increased CVD risk with tobacco use.

B. Copper IUD – may worsen menorrhagia and dysmenorrhea

C. Levonorgestrel IUD

D. Progesterone-only pill – difficulty with daily adherence

Key Point: Recognize Contraindications to Estrogens

- >35 years old and smoking >15 cigarettes a day
- Migraine with aura
- History of: CAD, vascular disease, VTE or clotting d/o
- DM with known microvascular disease (retinopathy, nephropathy, neuropathy) or other vascular disease
- HTN with SBP > 160
- Decompensated cirrhosis
- CKD due to nephrotic syndrome, hemodialysis, or peritoneal dialysis
- Current breast cancer

Breast Symptoms

Case A 28-year-old nulliparous woman with no significant past medical history is evaluated for a right breast lump. No history of breast trauma, nipple discharge, axillary lymphadenopathy. She is taking a combined OCP. Her mother had breast cancer at 65 years old.
Breast exam: no skin changes. Firm, 3-cm, non-tender, well-circumscribed mobile mass at 2:00, 4 cm from nipple. No lymphadenopathy.

Which of the following is the most appropriate diagnostic workup for this patient?

A- Screening Mammography

B- Ultrasound

C- MRI

D- Diagnostic Mammography and Ultrasound

Case A 28-year-old nulliparous woman with no significant past medical history is evaluated for a right breast lump. No history of breast trauma, nipple discharge, axillary lymphadenopathy. She is taking a combined OCP. Her mother had breast cancer at 65 years old.
Breast exam: no skin changes. Firm, 3-cm, non-tender, well-circumscribed mobile mass at 2:00, 4 cm from nipple. No lymphadenopathy.

Which of the following is the most appropriate diagnostic workup for this patient?

A- Screening Mammography

B- Ultrasound

C- MRI

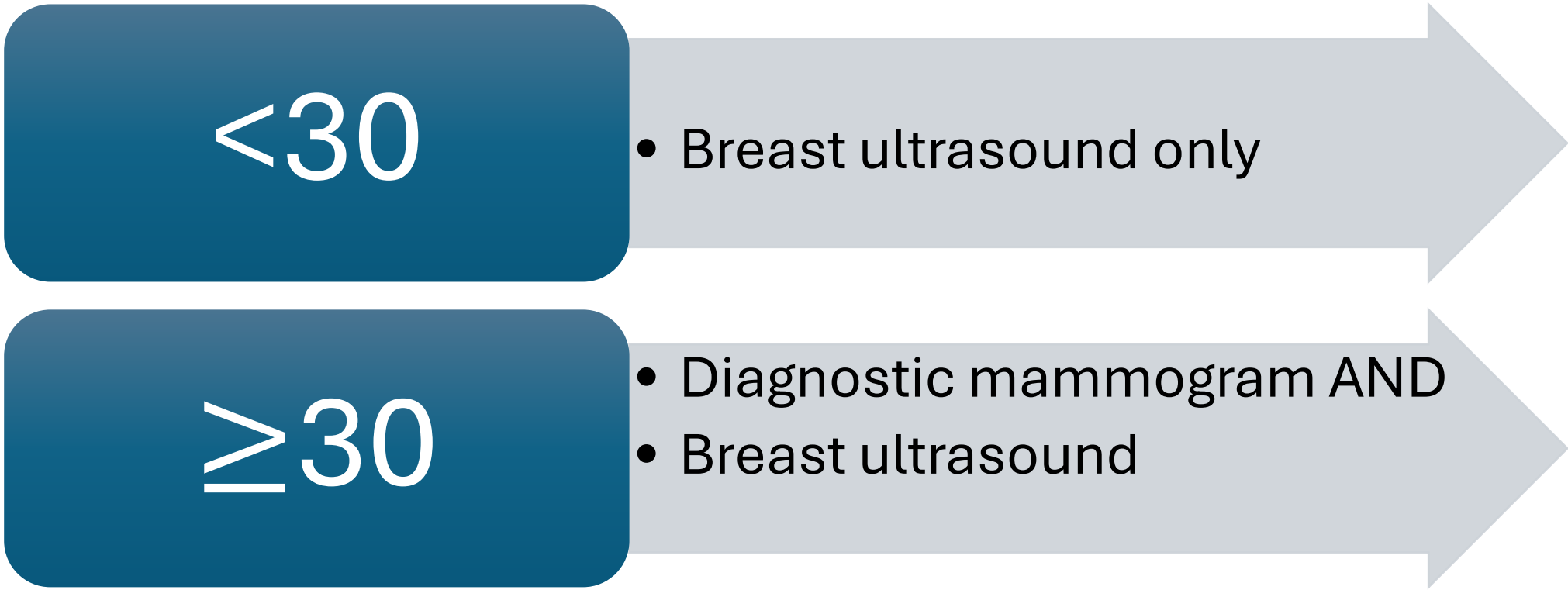
D- Diagnostic Mammography and Ultrasound

Key Point: Screening vs. diagnostic breast imaging

Breast cancer screening guidelines are applicable for routine breast cancer screening

Diagnostic breast imaging guidelines are used to assess breast symptoms, to identify pathology and rule out cancer

Key Point: Imaging workup of breast symptoms depends on age



Diffuse vs. focal breast symptoms

- Many women have bilateral **cyclic breast pain** with onset of menses.

- Women with **non-cyclic or focal breast pain**, even without palpable mass should undergo age-appropriate diagnostic imaging
  - Other causes of focal pain: trauma, cysts, duct ectasia, mastitis, ligamentous stretching due to large breast size, or a breast mass.

Menopause

Case

A 58-year-old woman with severe vaginal itching and discomfort, progressively worse x4 mo. No discharge or odor. Intercourse has become painful despite lubricant use. LMP was at 52 yo. She does not have hot flashes or night sweats.

Exam reveals dry vaginal mucosa that is smooth and shiny. Blood vessels are visible beneath pale vaginal mucosa. There is scant bleeding with speculum placement. No masses or growths noted on the cervix or in the vaginal canal.

Vaginal pH is 6.0. Wet mount shows occasional leukocytes. Whiff test result is negative. There are no clue cells and no hyphae on potassium hydroxide preparation.

What would you recommend for management of her symptoms?

A. Transdermal estradiol and oral micronized progesterone
B. Oral or topical metronidazole
C. Oral fluconazole x 1 dose
D. Low dose topical vaginal estrogen

Case

A 58-year-old woman with severe vaginal itching and discomfort, progressively worse x4 mo. No discharge or odor. Intercourse has become painful despite lubricant use. LMP was at 52 yo. She does not have hot flashes or night sweats.

Exam reveals dry vaginal mucosa that is smooth and shiny. Blood vessels are visible beneath pale vaginal mucosa. There is scant bleeding with speculum placement. No masses or growths noted on the cervix or in the vaginal canal.

Vaginal pH is 6.0. Wet mount shows occasional leukocytes. Whiff test result is negative. There are no clue cells and no hyphae on potassium hydroxide preparation.

What would you recommend for management of her symptoms?

A. Transdermal estradiol and oral micronized progesterone. Likely doesn't need systemic menopausal hormone therapy
B. Oral or topical metronidazole. Negative workup for bacterial vaginosis
C. Oral fluconazole x 1 dose. Negative workup for yeas infection
D. Low dose topical vaginal estrogen

Genitourinary syndrome of menopause

- Symptoms typically start a few years after menopause and worsen with time
  - Increased UTIs
  - Vaginal dryness, irritation
  - Scant bleeding

- Low dose topical vaginal estrogen safe for ALMOST everyone (check with patient's oncologist)

- Nonhormonal adjunctive therapy: over the counter vaginal moisturizers and as needed lubricants for intercourse

Case

52-year-old woman comes to see you for help with 6-month history of worsening hot flashes and night sweats. She has had to leave two work meetings in the past month due to symptoms. LMP 10 months ago. No personal or FH cancers. Meds: none. PMH: none. SH: none. Exam: VS normal. Exam unremarkable.

PREVENT 10 year ASCVD risk is calculated as 1.5%.

What is the most appropriate management for this patient's hot flashes?

A. Menopause hormone therapy with estrogen and progesterone
B. Menopause hormone therapy with estrogen alone
C. Low dose topical vaginal estrogen
D. Progesterone alone
E. Combined oral contraceptive pill

Case

52-year-old woman comes to see you for help with 6-month history of worsening hot flashes and night sweats. She had to leave a work meeting last week due to symptoms. She also had her first UTI recently. LMP 10 months ago. No personal or FH cancers. Meds: none. PMH: none. SH: none. Exam: VS normal. Exam unremarkable.

PREVENT 10 year ASCVD risk is calculated as 1.5%.

What is the most appropriate management for this patient's hot flashes?

A. Menopause hormone therapy with estrogen and progesterone
B. Menopause hormone therapy with estrogen alone – need endometrial protection
C. Low dose topical vaginal estrogen – will not treat her main symptoms
D. Progesterone alone – will not treat her main symptoms
E. Combined oral contraceptive pill – likely higher dose that is necessary

Key Point: menopause hormone therapy

- Combination systemic menopausal hormone therapy (estrogen + progesterone) is the most effective option
  - Generally initiate under 60 yo and within 10 years of menopause
- 5+ years of use >> risk of breast cancer increases
- Avoid use if: increased risk of breast cancer or personal history of breast cancer, ASCVD risk 10% or higher, history of stroke or VTE. Migraine, even with aura, is OK.
- Not recommended for primary prevention of chronic diseases. (USPSTF Grade D)

Menopause hormone therapy (MHT) regimens

Uterus present	No uterus	Non-estrogen alternatives
• Estrogen* + progesterone • Progestin to protect from endometrial hyperplasia. Can be oral, patch or IUD • Bazedoxifene (SERM)+ Estrogen	• Estrogen* alone	• Gabapentin, (Es)citalopram, (des)Venlafaxine, Paroxetine • Clonidine • Neurokinin 3 (NK3) receptor antagonists (eg: fezolinetant)

*Transdermal estrogen preferred when using- may mitigate CVD and clot risk

Thank you and good luck!

ninat@uw.edu

FEEDBACK PLEASE!

Please consider filling out this peer teaching evaluation for my academic promotion.

This is separate from the feedback you will be asked to give ACP for the board review course.