



Brigham and Women's Hospital

Founding Member, Mass General Brigham

Women's Health Board Review

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 - Clinical focus: Women's health
 - Research focus: Women's cardiovascular disease

DISCLOSURES

- NIH Grant Funding
- Bayer Scientific Advisory Board
- No relation to content discussed today.

Objectives

1. Reinforce important concepts in women's health.
2. Practice questions in key content areas of women's health for board review.

Question 1

A 32-year-old woman, G1P1, comes in for a visit 6 months postpartum.

- She is fatigued and has lost few of the 30 lbs she gained during pregnancy.
- She takes a multivitamin, no other medications.
- On physical examination:
 - Weight is 150 lb, height is 5'2".
 - The thyroid feels slightly enlarged, without nodules, and is nontender.
- CBC is normal.
- TSH is 24 mIU/L.

Question 1

Which of the following is TRUE?

- A. Subacute thyroiditis is the most likely diagnosis.
- B. This condition is likely to recur in subsequent pregnancies.
- C. TPO antibodies are likely to be negative.
- D. You should wait for spontaneous resolution rather than treating with thyroxine.
- E. She should have a thyroid ultrasound.

Question 1: Answer

Which of the following is TRUE?

- A. Subacute thyroiditis is the most likely diagnosis.
- B. This condition is likely to recur in subsequent pregnancies.**
- C. TPO antibodies are likely to be negative.
- D. You should wait for spontaneous resolution rather than treating with thyroxine.
- E. She should have a thyroid ultrasound.

Question 1: Discussion

- This patient has postpartum thyroiditis, a variant of autoimmune thyroiditis, which is characterized by 3 phases:
 - An initial hyperthyroid phase (within 6 months postpartum, lasting up to 2 months) due to leakage of thyroid hormone from an inflamed thyroid gland
 - Followed by a hypothyroid phase (typically occurring up to 10 months postpartum, and lasting 3–6 months), and then, in most cases,
 - Return to euthyroidism.
- TPO antibodies are characteristically positive, and recurrence is common following subsequent pregnancies.
- Symptomatic hypothyroidism should be treated with thyroxine, which should not be required for more than 6 months unless the patient has developed permanent hypothyroidism.
- Thyroid ultrasound may be useful in the evaluation of a thyroid nodule but is not indicated in the evaluation of thyroiditis.
- Subacute thyroiditis is a painful inflammation of the thyroid that often is described following upper respiratory infection.

Question 2

A 28-year-old woman comes to establish care.

- She has a long history of oligomenorrhea and hirsutism and was diagnosed with PCOS.
- Last menstrual period was 4 months ago, which is not unusual for her. She takes no medications.
- Physical exam: weight is 160 lb, height 5'3". Blood pressure is normal.
 - Slight terminal hair growth on moustache and sideburns above her umbilicus, and around her nipples.
 - Pelvic exam is limited by body habitus but appears to be within normal limits.
- Records indicate normal prolactin and TSH levels, normal level of fasting 17-OH progesterone, and slightly elevated total testosterone level.

Question 2

All of the following are true EXCEPT:

- A. This condition is associated with increased risk for glucose intolerance or diabetes.
- B. Risk for endometrial hyperplasia or cancer is increased.
- C. The finding of polycystic ovaries on pelvic ultrasound is highly sensitive and specific for the diagnosis.
- D. Luteinizing hormone (LH) levels are not required to make the diagnosis.
- E. Spironolactone may be useful in treatment of associated hirsutism.

Question 2: Answer

All of the following are true EXCEPT:

- A. This condition is associated with increased risk for glucose intolerance or diabetes.
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- C. **The finding of polycystic ovaries on pelvic ultrasound is highly sensitive and specific for the diagnosis.**
- D. Luteinizing hormone (LH) levels are not required to make the diagnosis.
- E. Spironolactone may be useful in treatment of associated hirsutism.

Question 2: Discussion

- PCOS is a diagnosis of exclusion and is clinically diagnosed by the combination of chronic anovulation and androgen excess not explained by another endocrine disorder (such as late-onset congenital adrenal hyperplasia, hyperprolactinemia, androgen-secreting tumor.)
- Although a polycystic appearance of the ovaries is generally present, this has also been identified in 25% of women without other features of PCOS, and this finding is considered neither sufficient nor necessary for the diagnosis.
- LH levels are typically elevated (with increased LH/FSH ratio), but this is not necessary for the diagnosis and need not be routinely measured.
- A clear association has been observed between PCOS and insulin resistance, and studies have documented an increased prevalence of glucose intolerance and diabetes in affected women, even independent of associated obesity, which is common but not always present in affected women.
- Women with PCOS also have increased risk for endometrial hyperplasia and cancer.

Question 3

A 48-year-old woman reports irregular menstrual cycles for the past year.

- Last menstrual period was 9 weeks ago
- Has had hot flashes for past 2 years, affecting sleep
- No significant past medical history
- No family history of blood clots or breast cancer
- No current medications.
- Physical exam is unremarkable:
 - Blood pressure normal
 - Normal pelvic exam and breast exam

Question 3

Which of the following statements is FALSE?

- A. A follicle-stimulating hormone (FSH) level should be checked to confirm menopause.
- B. Low-dose hormone therapy could be considered.
- C. A history of prior stroke would be a contraindication to the use of postmenopausal hormone therapy.
- D. Combined therapy with low dose estrogen and progestin would be preferable to an estrogen only regimen.

Question 3: Answer

Which of the following statements is FALSE?

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- B. Low-dose hormone therapy could be considered.
- C. A history of prior stroke would be a contraindication to the use of postmenopausal hormone therapy.
- D. Combined therapy with low dose estrogen and progestin would be preferable to an estrogen only regimen.

Question 3: Discussion

- Menopause is strictly defined as cessation of menses for ≥ 12 months, but menopausal symptoms and changes in menstrual cycle pattern often begin well before menses cease.
- A high FSH is characteristic of menopause, but checking FSH levels is not routinely indicated, as an FSH level is an unreliable indicator of impending menopause in perimenopausal women.
- Menopausal hormone therapy is very useful and effective for managing bothersome vasomotor symptoms. In a woman with an intact uterus, estrogen therapy should be accompanied by progestin therapy to prevent the development of endometrial hyperplasia.
- Contraindications to hormone therapy include personal history of breast cancer, coronary heart disease, stroke, active liver disease and unexplained vaginal bleeding.

Question 4

This patient decides at first to take nothing for her symptoms but returns a year later:

- She has persistent hot flashes and no menses for the past 6 months.
- She is now interested in menopausal hormone therapy.
- Physical exam is normal.
- Mammogram is negative.

Question 4

Which of the following statements is FALSE?

- A. Oral hormone therapy is associated with increased risk for gallstones.
- B. Oral hormone therapy increases the risk for deep venous thrombosis/pulmonary embolism.
- C. Progestins may have negative effects on mood.
- D. Vaginal bleeding is rare after the first 3 months on combined hormone therapy.
- E. Oral hormone therapy increases the risk for stroke.

Question: Answer

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- B. Oral hormone therapy increases the risk for deep venous thrombosis/pulmonary embolism.
- C. Progestins may have negative effects on mood.
- D. **Vaginal bleeding is rare after the first 3 months on combined hormone replacement.**
- E. Oral hormone therapy increases the risk for stroke.

Question 4: Discussion

- Menopausal hormone therapy (MHT) is the most effective treatment and is FDA approved for treatment of VMS.
- Patients should be educated regarding potential adverse effects of estrogen therapy including nausea, headache, and heavy bleeding, whereas progestins may have adverse effects on mood and may cause breast tenderness.
- Bleeding is common on combined estrogen/progestin therapy. Bleeding is usually predictable on cyclical regimens, whereas unpredictable intermittent bleeding is common the first six months of daily combined regimens.
- In the WHI, oral CEE/medroxyprogesterone increased risks for DVT/PE, stroke, breast cancer, gallstones, and dementia (average age 67 years). Transdermal estrogens may have lower risk for thrombosis and gallstones.
- MHT is not indicated for the prevention of cardiovascular disease. Coronary events were increased early after initiation of CEE/medroxyprogesterone in randomized trials of secondary prevention and among women generally without history of heart disease.

Question 5

A 24-year-old woman complains of irregular menstrual cycles.

- She reports a 30-lb weight gain over the past 3 years, which she has attributed to a sedentary job.
- She takes no medications.
- Physical exam: weight 180 lb, height 5'6".
 - Mild hirsutism and acne on the face and back.
 - Abdomen is obese, with pale striae.

Question 5

Which of the following conditions is inconsistent with this presentation?

- A. Late-onset congenital adrenal hyperplasia
- B. Polycystic ovary syndrome
- C. Cushing's syndrome
- D. Turner syndrome
- E. Androgen-secreting tumor

Question 5: Answer

Which of the following conditions is inconsistent with this presentation?

- A. Late-onset congenital adrenal hyperplasia
- B. Polycystic ovary syndrome
- C. Cushing's syndrome
- D. Turner syndrome**
- E. Androgen-secreting tumor

Question 5: Discussion

- This patient is demonstrating symptoms and signs consistent with androgen excess, including irregular menstrual cycles, acne, and hirsutism.
- Possible causes of androgen excess include polycystic ovary syndrome, late-onset congenital hyperplasia, Cushing's syndrome, and an androgen secreting tumor.
- Turner syndrome (XO karyotype) is a cause of primary amenorrhea and is associated with other characteristic features, including short stature, failure to develop secondary sexual characteristics, and somatic abnormalities (e.g., webbed neck, shield-like chest); androgen excess is not a feature of Turner syndrome.

Question 6

A 62-year-old woman comes to establish primary care.

- Completed menopause at age 52
- No prior hormone therapy.
- History of right tibia fracture while skiing 10 years ago and hypertension.
- Current medication: hydrochlorothiazide 25 mg daily.
- Smokes cigarettes, ½ pack/day. She does not drink alcohol. She swims regularly for exercise.
- No family history of hip fracture.
- Physical examination: weight 114 lb, height 5'4".
 - Blood pressure is 128/80 mm Hg.
 - Rest of the exam unremarkable.

Question 6

Which of the following is NOT a risk factor for osteoporosis in this woman?

- A. Postmenopausal status
- B. Cigarette smoking
- C. Her weight
- D. Her prior fracture
- E. Use of hydrochlorothiazide

Question 6: Answer

Which of the following is NOT a risk factor for osteoporosis in this woman?

- A. Postmenopausal status
- B. Cigarette smoking
- C. Her weight
- D. Her prior fracture
- E. **Use of hydrochlorothiazide**

Question 6: Discussion

- Risk factors for osteoporosis include age, early menopause, cigarette smoking, low body weight, fragility fracture, family history of osteoporosis in a first-degree relative, excessive alcohol intake, physical inactivity, Caucasian race, and inadequate intake of calcium.
- A history of dementia, falls, or frailty also increases fracture risk.
- Although some medications (e.g., glucocorticoids, aromatase inhibitors) increase the risk for osteoporosis, hydrochlorothiazide reduces urinary calcium excretion and has been associated with reduced fracture risk.

Question 7

All of the following statements are true for the management of this patient EXCEPT:

- A. She should consume 1000- 1200 mg calcium daily.
- B. Drinking 2 cups of milk daily will give her adequate vitamin D.
- C. Weight-bearing exercise is recommended.
- D. Calcium carbonate supplements should be taken with meals.
- E. Swimming would not be expected to increase her bone density.

Question 7: Answer

All of the following statements are true for the management of this patient EXCEPT:

- A. She should consume 1200 mg calcium daily.
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- C. Weight-bearing exercise is recommended.
- D. Calcium carbonate supplements should be taken with meals.
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Question 7: Discussion

- Approaches recommended to optimize bone health include adequate intake of calcium (1000-1200 mg recommended daily in a postmenopausal woman), and vitamin D ($\geq$ 400-800 IU daily).
- Calcium carbonate (e.g., in Tums, Os-Cal, Caltrate) is reportedly better absorbed with meals.
- In contrast, calcium citrate (e.g., Citracal) can be taken at any time; the latter is recommended in patients taking proton pump inhibitors and is better tolerated by some women but is also more expensive.
- Vitamin D is added to milk, but only 100 IU per 8-oz serving. A standard multivitamin will provide 400 IU vitamin D daily.
- Weight-bearing exercise is recommended. Swimming is not associated with an increase in bone density.

Question 8

Bone density of the spine shows T -score -2.6 and Z -score -1.1 . Which of the following statements is incorrect?

- A. She has osteoporosis.
- B. Osteoarthritis of spine could falsely increase her bone density.
- C. Her Z -score compares her to young normal women.
- D. Bone mineral density (BMD) is the single best predictor of fracture.
- E. This Z -score would not suggest the need for a workup for secondary causes of osteoporosis.

Question 8: Answer

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Question 8: Discussion

- The *T*-score in a bone density report represents a comparison with “peak” bone density of young normal women
- The *Z*-score represents a comparison with age-matched women.
- The *T*-score is used to make the diagnoses of osteopenia or osteoporosis:
 - Osteopenia = *T*-score between -1 and -2.5 standard deviations below peak
 - Osteoporosis = *T*-score < -2.5 standard deviations below peak.
- A *Z*-score below -2 suggests bone loss out of proportion for age
 - May be used to identify women more likely to have secondary causes of osteoporosis.
- Osteophytes or a compression fracture may falsely elevate bone density readings, and such affected areas should be deleted from bone density analysis.

Question 9

Which of the following statements is TRUE regarding anti-resorptive therapy?

- A. Raloxifene therapy would be expected both to improve bone density and to reduce hot flashes.
- B. Estrogen therapy is considered first line treatment for osteoporosis.
- C. Neither alendronate nor risedronate may be taken with food.
- D. Raloxifene does not increase risk for blood clots.
- E. Routine dental work should be deferred in patients taking bisphosphonates.

Question 9: Answer

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Question 9: Discussion

- Postmenopausal estrogen therapy reduces the risk of fracture, but due to risks associated with long-term use, is not recommended as a standard therapy for osteoporosis.
- Raloxifene (a SERM) reduces the risk of vertebral fractures but not hip fractures. It may worsen hot flashes and increases risk for DVT/PE.
- Oral bisphosphonates should be taken on an empty stomach, first thing in the morning, 30 minutes prior to eating, to facilitate absorption (and remain upright after).
- Osteonecrosis of the jaw has been reported among patients taking bisphosphonates.
 - Most reports are in patients using high doses intravenously for metastatic bone disease, although they are reported in osteoporosis patients.
- Routine dental care should not be withheld in patients taking bisphosphonates.
- Atypical femur fractures have also been associated with bisphosphonate use, although rare, and fractures overall are reduced with bisphosphonate use.

Question 10

A 48-year-old woman who has been your patient for several years complains of constipation and abdominal pain.

- She has seen 2 outside gastroenterologists in the past year.
- Colonoscopy, barium enema, endoscopy, and abdominal CT scan were all negative.
- She is otherwise healthy except for a fracture of the radius from a fall down the stairs the preceding year.
- Married, without children.
- Physical exam remarkable only for ecchymoses on the back and right arm.

Question 10

The most appropriate next step would be to:

- A. Repeat a colonoscopy at your institution.
- B. Ask her whether she feels safe in her relationship/
has ever been hurt or threatened in her relationship.
- C. Ask her generally about how she is doing but avoid
asking directly about domestic violence.
- D. Call her husband and discuss the situation with him.

Question 10: Answer

The most appropriate next step would be to:

- A. Repeat a colonoscopy at your institution.
- B. **Ask her whether she feels safe in her relationship/ has ever been hurt or threatened in her relationship.**
- C. Ask her generally about how she is doing, but avoid asking directly about domestic violence.
- D. Call her husband and discuss the situation with him.

Question 10: Discussion

- History of trauma is common in our patients- universal trauma-informed care is the goal.
- The possibility of interpersonal violence should be considered in all women, regardless of background.
- Gastrointestinal complaints are common in women who have experienced trauma and interpersonal violence.
- Unexplained fractures or bruising are more obvious clues, but there are often no outward signs, and abuse may be psychological rather than physical.
- Open ended questions may be the most effective: *All couples have disagreements; how do you and your partner resolve disagreements?*
- Broad inquiry, followed by risk assessment and a safety plan are the goal.

Question 11

A 37-year-old woman comes for evaluation of a lump she discovered in the left breast 1 month earlier.

- G1P1, menarche at 14 years. Regular menses.
- Last menstrual period occurred 1 week ago.
- She drinks 4 cups of coffee daily.
- Family history is negative for breast cancer. Her mother has fibrocystic breast disease.
- Physical examination: Appears well.
 - 1.5-cm mass palpable in the upper outer quadrant of the left breast, slightly tender to palpation.
 - No axillary adenopathy.
- Mammogram is negative.

Question 11

Which of the following would be the most appropriate next step?

- A. Reassure her. No intervention is indicated.
- B. Schedule repeat mammogram in 4–6 months.
- C. Tell her to stop coffee and other caffeine intake and return in 4–6 months for reexamination.
- D. Order an ultrasound; if this is negative, no further workup is required.
- E. Order an ultrasound; referral should be made for biopsy unless the lump is consistent with a simple cyst.

Question 11: Answer

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- E. **Order an ultrasound; referral should be made for biopsy unless the lump is consistent with a simple cyst.**

Question 11:Discussion

- A palpable breast mass requires further evaluation regardless of patient age or mammogram results.
- Although coffee has been associated with fibrocystic breast disease, a palpable discrete mass should not be attributed to this or to other benign etiologies without appropriate workup.
- Ultrasound would be the next step; biopsy would be indicated for findings other than a simple cyst in this woman.

Question 12

A 30-year-old G0P0 with a 10-year history of Type 1 DM is interested in becoming pregnant.

- History of nonproliferative retinopathy: last eye exam 2 years ago.
- Checks blood sugars once daily.
- Current Medications: glargine insulin 12 units at night, regular insulin (sliding scale) with meals, and prenatal vitamin.
- Her blood pressure is 124/80 mm Hg; the rest of the examination is unremarkable.
- Labs: HbA1c 9.0, creatinine 1.3 mg/dL. There is trace protein on urine dipstick.

Question 12

All of the following would be recommended prior to conception EXCEPT:

- A. An angiotensin-converting enzyme inhibitor should be started to minimize progression of renal disease in pregnancy.
- B. She should increase her frequency of blood sugar monitoring.
- C. She should be referred to ophthalmology.
- D. Blood sugar control should be tightened to achieve a normal hemoglobin A1c.
- E. She should have a prescription for glucagon.

Question 12: Answer

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Question 12: Discussion

- Tight glycemic control is recommended prior to conception in women with diabetes; risk of congenital anomalies increases with increasing first-trimester hemoglobin A1c levels.
- Target hemoglobin A1c entering pregnancy should be near 6%.
- Eye exam should be checked prior to pregnancy, as proliferative retinopathy may progress during pregnancy.
- Hypoglycemia is common in the first trimester; women should be aware of symptoms and treatment of hypoglycemia and have glucagon available.
- Angiotensin-converting enzyme (ACE) inhibitors and angiotensin receptor blockers are contraindicated in pregnancy.
 - Use in 1st trimester has been associated with major congenital anomalies, including cardiac and central nervous system defects.
 - Use in 2nd and 3rd trimesters is associated with oligohydramnios, intrauterine growth retardation, anuria, renal failure, and death.

Question 13

Which of the following strategies is consistent with current guidelines for cervical cancer screening for individuals with a cervix:

- A. High risk HPV testing by a clinician every 5 years (following normal test) from age 30- 65 years.
- B. Pap testing every 3 years starting at age 18 in sexually active woman.
- C. Cytology screening every 5 years for women over age 65.
- D. No cervical cancer screening in individuals who have had HPV vaccination.

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- D. No cervical cancer screening in individuals who have had HPV vaccination.

Question 13: Discussion

- Goal of pap smear is detection of high-risk lesions/ prevention of invasive disease. HPV duration and type are the strongest risk factors for cervical cancer.
- Pap smears are recommended starting at age 21 (not before)- cytology every three years without hrHPV testing until age 29.
- For average risk aged 30-65 years, acceptable strategies include HPV testing alone every 5 years if clinician collected or every 3 years if self-collected; combined hrHPV and cytologic testing every 5 years; cytology every 3 years if hrHPV testing not available..
- Current guidelines suggest referral to colposcopy if CIN3+ risk $\geq 4\%$.
- Above age 65: if negative history in the past 10 years (3 negative pap tests or 2 negative HPV; ACS HPV at 60 and 65) AND no prior CIN 2-3 within the past 20-25 years AND not immunocompromised, no active screening.
- These recommendations do not apply to high-risk women. HPV vaccination does not alter screening recommendations.

Question 14

A 32-year-old woman, G1P0, is 16 weeks pregnant.

- Current symptoms include palpitations and weight loss.
- Physical exam is notable for pulse 110.
 - She has lid lag but no appreciable exophthalmos.
 - The thyroid gland is symmetrically enlarged to about 1½ times normal size.
- TSH is <0.05 mIU/L, T_4 is 22.

Question 14

Which of the following is incorrect?

- A. PTU can be used in the first trimester of pregnancy.
- B. A thyroid uptake should be performed to confirm the diagnosis.
- C. A beta blocker could be used for symptoms.
- D. Thyroid-stimulating immunoglobulin (TSI) would likely be elevated.
- E. This condition is likely to improve with treatment over the course of pregnancy.

Question 14: Answer

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- B. A thyroid uptake should be performed to confirm the diagnosis.**
- C. A beta blocker could be used for symptoms.
- D. Thyroid-stimulating immunoglobulin (TSI) would likely be elevated.
- E. This condition is likely to improve with treatment over the course of pregnancy.

Question 14: Discussion

- The presentation is most consistent with Graves' disease, which may present early in pregnancy.
- Thyroid-stimulating immunoglobulins (TSI) are typically detectable but need not be checked clinically.
- If antithyroid drug therapy is needed in the 1st trimester, PTU is considered the preferred drug, as methimazole is associated with a rare scalp defect, aplasia cutis.
- Outside of the 1st trimester, methimazole is the preferred drug, given reports of liver toxicity and liver failure associated with PTU.
 - The minimal dose necessary to keep T4 levels upper normal or slightly above the normal range is recommended to minimize drug exposure of the fetus (as this crosses the placenta).
- Beta blockers can be used for symptom control in pregnancy.
- Thyroid uptake testing or treatment with radioactive iodine is strictly *contraindicated* in pregnancy.
- The disease tends to remit with treatment over pregnancy, and thyroid function should be followed closely to avoid overtreatment.

Question 15

A 22-year-old woman comes for contraceptive counseling. All of the following are true EXCEPT:

- A. The risks associated with use of progestin only contraceptive pills (OCPs) outweigh the benefits for women with a history of coronary heart disease or stroke.
- B. OCP use is associated with a reduced risk for ovarian cancer.
- C. Women who are at average risk of STDs (without current cervicitis) are considered appropriate candidates for an IUD.
- D. Currently users of OCPs have a two-fold increase in breast cancer risk.

Question 15: Answer

A 22-year-old woman comes for contraceptive counseling. All of the following are true EXCEPT:

- A. The risks associated with use of progestin only oral contraceptive pills (OCPs) outweigh the benefits for women with a history of coronary heart disease or stroke.
- B. OCP use is associated with a reduced risk for ovarian cancer.
- C. Women who are at average risk of STDs (without current cervicitis) are considered appropriate candidates for current IUDs.
- D. **Current users of OCPs have a two-fold increase in breast cancer risk.**

Question 15: Discussion

- Risks of OCPs include DVT/PE, even with low-dose preparations; the risk is reported to be higher with OCPs containing desogestrel versus progestins such as levonorgestrel.
- Myocardial infarction and stroke are rare risks; the risk is higher in women who smoke, have uncontrolled hypertension, or migraine with aura.
 - A history of cardiovascular disease is a contraindication to use of combined OCPs, but progestin only OCP can be considered.
- OCP users have been reported to have lower risk of ovarian cancer.
- Current OCPs have been associated with a small (about 20%) increase in breast cancer risk.
- Long-acting reversible contraceptives are highly effective ; their use is associated with reduced risk of unintended pregnancy in sexually active young women (versus short acting methods). Most women are eligible for IUDs, except for those with cervicitis at time of insertion.

Question 16

You are paged by a 32-year-old woman who is worried about pregnancy after having had unprotected intercourse 36 hours prior. Her LMP was 16 days ago.

Which of the following is TRUE?

- A. Loestrin (20 µg EE), 2 now and 2 more in 12 hours, is appropriate for use as emergency contraception.
- B. Levonorgestrel, 1.5 mg as a single dose, is appropriate for use as emergency contraception.
- C. It is too late to use emergency contraception.
- D. Emergency contraception is not warranted at this time in the cycle.

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Question 16: Discussion

- Emergency contraception reduces rate of pregnancy when given within 72 to 120 hours of unprotected intercourse.
- Effective emergency contraception therapies include:
 - Ulipristal acetate 30 mg (Ella, ~\$50). Most effective pill.
 - Levonorgestrel 1.5 mg single dose (Plan B, One Step, Take Action, My Way, After Pill, ~\$15-50). Not effective if BMI >30.
- Levonorgestrel is available without a prescription. A prescription is required for ulipristal acetate (it is not as effective if on OCP).
- Intercourse during the luteal phase (based on LMP) does not rule out possible pregnancy; emergency contraception is still appropriate in this setting.
- Although the efficacy of emergency contraception falls with increasing time after intercourse, it is still reasonable to use within 5 days of unprotected intercourse.

Question 17

A routine Pap smear in a 42-year-old woman shows atypical cells. She is in a monogamous relationship and has previously had normal Pap smears.

Which of the following would be MOST appropriate?

- A. Treat empirically with doxycycline and repeat Pap in 3 months.
- B. This is a normal finding in a perimenopausal woman and does not require follow-up.
- C. Endometrial sampling should be done to exclude endometrial cancer.
- D. Perform human papilloma virus (HPV) testing for high-risk subtypes.

Question 17: Answer

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- C. Endometrial sampling should be done to exclude endometrial cancer.
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Question 17: Discussion

- Atypical cells are a common finding on Pap smears.
- Bacterial infection is sometimes an underlying cause of atypical cells and should be treated if there is good reason to suspect this, but not in asymptomatic low-risk women.
- Ideally, HPV testing is included in pap smear screening and should always be performed when atypical cells are found. Current management relies on overall risk of CIN3. If ACUS and HPV positive, colposcopy is usually indicated.
- Details on pap smear management can be found on the American Society of Cervical Cancer Prevention (ASCCP) website (<https://www.asccp.org/management-guidelines>) or via their app (Android and Apple).

Question 18

A 35-year-old woman presents for her initial primary care visit.

- Past medical history only notable for gestational diabetes during her pregnancy 3 years ago.
- At her 6-week postpartum visit, she completed an oral glucose tolerance test (OGTT) and was told that her diabetes in pregnancy had completely resolved.
- She has not seen another physician since her delivery 3 years ago.

Question 18

Which of the following is TRUE?

- A. Gestational diabetes is unlikely to recur in a subsequent pregnancy.
- B. Since she had a normal postpartum OGTT, her risk for developing diabetes in the future is no higher than that of a woman whose pregnancy was not complicated by GDM.
- C. She is at increased risk for developing Type 2 diabetes, compared with the general population.
- D. Sulfonylureas are recommended to reduce future risk of diabetes.

Question 18: Answer

Which of the following is TRUE?

- A. Gestational diabetes is unlikely to recur in a subsequent pregnancy.
- B. Since she had a normal postpartum OGTT, her risk for developing diabetes in the future is no higher than that of a woman whose pregnancy was not complicated by GDM.
- C. **She is at increased risk for developing Type 2 diabetes, compared with the general population.**
- D. Sulfonylureas are recommended to reduce future risk of diabetes.

Question 18: Discussion

- Women with gestational diabetes (based on ≥ 2 abnormal values on OGTT performed at 24-28 weeks gestation) often have normal glucose levels after delivery.
- Women should complete a 75-gram OGTT 6-12 weeks postpartum to assess for persistent glucose abnormalities, such as impaired fasting glucose, impaired glucose tolerance or overt diabetes.
- Even with normal postpartum OGTT results, women have increased risk for progressing to pre-diabetes or overt diabetes
- Glycemic status should be monitored long-term in these women by periodic assessment of fasting blood sugar, HbA1c, or 75 g OGTT:
 - At a minimum, monitoring every 3 years is recommended
 - Annual screening recommended in women with impaired fasting glucose or impaired glucose tolerance.
- Based on data from the Diabetes Prevention Program, lifestyle modification and metformin are effective in preventing progression to diabetes in the future; sulfonylureas are not used for diabetes prevention.