

Prenatal Care

Topic- based Uworld Questions

Block 1, 2, 7, 8



A 28-year-old woman, gravida 1 para 0, comes to the office in November for her first prenatal visit. The patient has mild nausea and vomiting every morning but is able to tolerate food during the rest of the day. She has had no vaginal bleeding, abnormal discharge, or cramping. Her last menstrual period was 8 weeks ago. The patient has no medical problems and takes only prenatal vitamins. She does not use tobacco, alcohol, or illicit drugs. Family history is significant for a father with type 2 diabetes mellitus who had a heart attack at age 55. The patient has had 2 lifetime sexual partners and has never had a sexually transmitted infection. Blood pressure is 132/80 mm Hg and pulse is 84/min. BMI is 23 kg/m². Pelvic examination shows an 8-week anteverted uterus and a closed cervix. Transvaginal ultrasound reveals an 8-week intrauterine gestation with a normal fetal heartbeat. Which of the following is indicated at this visit?

- A. Fasting blood glucose level
- B. Hepatitis C antibody testing
- C. Inactivated influenza vaccine
- D. *Trichomonas vaginalis* nucleic acid amplification testing
- E. Wet mount microscopy

Submit



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- A. Fasting blood glucose level (9%)
- B. Hepatitis C antibody testing (12%)
- C. Inactivated influenza vaccine (71%)
- D. *Trichomonas vaginalis* nucleic acid amplification testing (4%)
- E. Wet mount microscopy (2%)

Omitted

Correct answer
C 71%
Answered correctly 02 secs
Time Spent 03/16/2020
Last Updated

Explanation

Routine prenatal laboratory tests



Explanation

Routine prenatal laboratory tests

Initial prenatal visit	<ul style="list-style-type: none"> • Rh(D) type, antibody screen • Hemoglobin/hematocrit, MCV • HIV, VDRL/RPR, HBsAg • Rubella & varicella immunity • Pap test (if screening indicated) • Chlamydia PCR • Urine culture • Dipstick for urine protein
24-28 weeks	<ul style="list-style-type: none"> • Hemoglobin/hematocrit • Antibody screen if Rh(D) negative • 50-g 1-hour GCT
35-37 weeks	<ul style="list-style-type: none"> • Group B <i>Streptococcus</i> culture

GCT = oral glucose challenge test; HBsAg = hepatitis B surface antigen; MCV = mean corpuscular volume; PCR = polymerase chain reaction; RPR = rapid plasma reagin.

Pregnancy is associated with an increased risk for **influenza-associated morbidity and mortality** (eg, pneumonia, acute respiratory distress syndrome). Therefore, all pregnant women without contraindications should receive the **inactivated influenza vaccination** as soon as it becomes available. The inactivated influenza vaccine is **safe during every trimester** of pregnancy and while **breastfeeding**. The live attenuated intranasal vaccine is contraindicated during pregnancy due to the risk of congenital infection but is safe during breastfeeding. In addition to preventing influenza in the mother, vaccination also provides passive neonatal immunity and has been shown to decrease the frequency and



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(Choice A) All women are screened at 24-28 weeks gestation for gestational diabetes mellitus. High-risk patients (eg, morbid obesity, prior macrosomic infant) are screened early in pregnancy. Although this patient has a family history of type 2 diabetes mellitus, her BMI is $<25 \text{ kg/m}^2$; therefore, she is not considered high risk. In addition, screening for gestational diabetes mellitus is with the 50-g 1-hour glucose challenge test as it is more sensitive than a fasting blood glucose test.

(Choice B) Screening for hepatitis C during pregnancy is indicated only for patients with risk factors (eg, HIV-positive status, intravenous drug use); universal screening is not recommended.

(Choice D) HIV-infected women undergo routine screening for *Trichomonas vaginalis* due to high disease prevalence. In contrast, asymptomatic HIV-negative pregnant women do not undergo routine *T vaginalis* screening.

(Choice E) Wet mount microscopy is used in the evaluation of vaginitis (eg, abnormal vaginal discharge). It is not performed in asymptomatic patients.

Educational objective:

Influenza infection during pregnancy is associated with increased morbidity and mortality. All pregnant patients should be vaccinated during influenza season with the inactivated influenza vaccine. Vaccination is safe in every trimester and during breastfeeding.

References

- [ACOG Committee Opinion No. 468: influenza vaccination during pregnancy.](#)

A 26-year-old woman, gravida 1, para 0, comes to the physician for a prenatal visit. She did not keep accurate records of her menstrual periods but the last one was approximately 7 months ago. Early in the pregnancy, an ultrasound showed that she was at approximately 6 weeks gestation, giving her a current gestational age of 32 weeks. The patient's blood pressure is 110/60 mm Hg and pulse is 90/min. On examination, her fundal height is 26 cm. Fetal heart tones by Doppler shows a rate of 140/min. An ultrasound is performed and calculates the patient's gestational age as 28 weeks based on the fetal biparietal diameter and femur length. The measured fetal abdominal circumference is consistent with a gestational age of 26 weeks. Which of the following is the most accurate method for estimating the current gestational age?

- A. Abdominal circumference
- B. Estimated fetal weight
- C. First trimester ultrasound
- D. Fundal height
- E. Last menstrual period
- F. Third trimester ultrasound

Submit

A 26-year-old woman, gravida 1, para 0, comes to the physician for a prenatal visit. She did not keep accurate records of her menstrual periods but the last one was approximately 7 months ago. Early in the pregnancy, an ultrasound showed that she was at approximately 6 weeks gestation, giving her a current gestational age of 32 weeks. The patient's blood pressure is 110/60 mm Hg and pulse is 90/min. On examination, her fundal height is 26 cm. Fetal heart tones by Doppler shows a rate of 140/min. An ultrasound is performed and calculates the patient's gestational age as 28 weeks based on the fetal biparietal diameter and femur length. The measured fetal abdominal circumference is consistent with a gestational age of 26 weeks. Which of the following is the most accurate method for estimating the current gestational age?

- A. Abdominal circumference (3%)
- B. Estimated fetal weight (0%)
- C. First trimester ultrasound (79%)
- D. Fundal height (3%)
- E. Last menstrual period (5%)
- F. Third trimester ultrasound (6%)

Omitted

Correct answer
C79%
Answered correctly02 secs
Time Spent01/10/2020
Last Updated

Explanation

Ultrasound assessment of gestational age

Ultrasound assessment of gestational age		
Ultrasound parameter	Gestational age (weeks)	Accuracy (days)
Gestational sac diameter	4.5–6	+/- 5–7
Crown-rump length	7–10	+/- 3
	11–14	+/- 5
Biparietal diameter, head circumference, femur length	14–20	+/- 7
	21–30	+/- 14
	>30	+/- 21–28

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Ultrasound is commonly used to estimate the gestational age of pregnancy. **First trimester ultrasound** with **crown-rump length** measurement is the most accurate method of determining gestational age. It becomes less accurate as the pregnancy progresses as there is minimal variability in size among fetuses during the first trimester. The accuracy varies from +/- 3 to 5 days between 7–14 weeks gestation. If an ultrasound in the second or third trimesters shows a discrepancy between estimated gestational age and fetal measurements (seen in this patient), growth problems should be considered (eg, fetal growth restriction, macrosomia). The estimated gestational age (EGA) from the first trimester ultrasound should not be changed as it is more accurate than ultrasound estimates in the second and third trimesters.

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(Choices A, B, and F) After the first trimester, fetal abdominal circumference, biparietal diameter, femur length, and head circumference are used to estimate gestational age. The accuracy in the second trimester ranges from +/- 1–2 weeks and decreases to +/- 2–3 weeks in the third trimester. The estimated fetal weight (EFW) can also be determined from these measurements and varies in accuracy by +/- 15%.

(Choice D) After 20 weeks gestation, **fundal height** can be measured in centimeters. This is done by measuring from the pubic symphysis to the top of the fundus. This measurement correlates with the gestational age by +/- 3 weeks. However, fundal height measurement can be confounded by leiomyomata and obesity; it is therefore less accurate than first trimester ultrasound dating.

(Choice E) Last menstrual period (LMP) is commonly used for EGA, but may also be inaccurate. Pregnancy dating by LMP assumes a normal 28-day cycle with fertilization occurring on day 14. Many women do not have a 28-day cycle and fertilization may occur before or after day 14. In a patient with a reliable LMP and normal menses, the estimated date of delivery and gestational age are based on LMP. If the EGA varies by >7 days in the first trimester and >10 days in the second trimester, then ultrasound EGA is used rather than LMP.

Educational objective:

Ultrasound dating with fetal crown-rump measurement in the first trimester is the most accurate way to determine estimated gestational age (EGA). EGA should not be changed based on measurement discrepancies on a second or third trimester ultrasound.

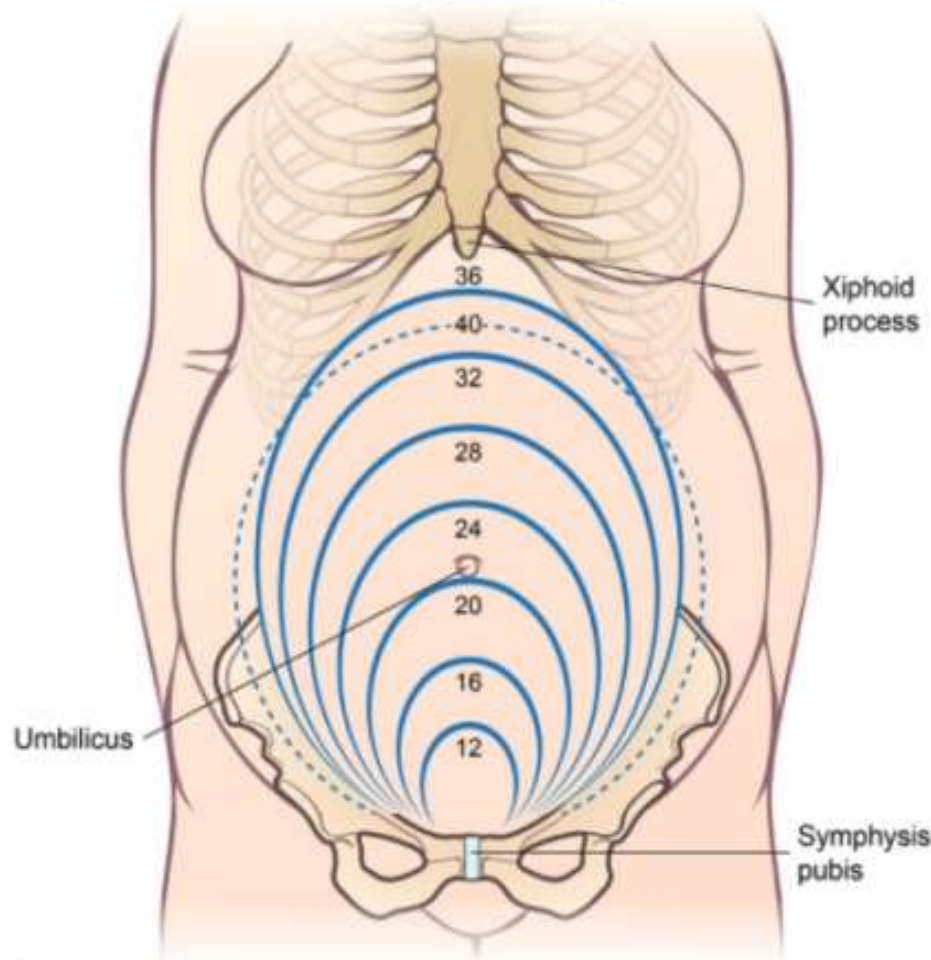
References

- [Ultrasonography in pregnancy.](#)

Ultrasound is commonly used to estimate the gestational age of pregnancy. **First trimester ultrasound** with **crown-rump length** measurement is

Exhibit Display

Measuring fundal height



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