

MULTIPLE CHOICE

OB FIRST TRIMESTER - PRACTICE SET - ANSWER KEY

PROPOSED FOR REVIEW - questions are the author's verbatim Q&A; distractors are auto-selected from other answers in the same bank and must be checked by a subject-matter reviewer (a distractor could coincidentally be correct). Not authoritative assessment content.

1. A yolk sac diameter greater than which value is associated with an increased risk of pregnancy loss?

- A. 3 mm
- B. 15 mm
- C. 6 mm**
- D. 10 mm

2. The crown-rump length is measured between which two landmarks?

- A. The top of the head to the heel
- B. The biparietal diameter to the rump
- C. The yolk sac to the rump
- D. The top of the head to the rump of the embryo, excluding limbs and yolk sac**

3. What is the mean sac diameter calculated from?

- A. The single longest diameter of the gestational sac
- B. The average of the length, width, and height of the gestational sac**
- C. The circumference of the gestational sac divided by pi
- D. The diameter measured at the level of the yolk sac

4. A crescent-shaped hypoechoic collection adjacent to the gestational sac in a first-trimester patient with bleeding most likely represents which finding?

- A. Yolk sac
- B. Subchorionic hemorrhage**
- C. Amniotic band
- D. Pseudogestational sac

5. The yolk sac in the first trimester provides which primary function for the developing embryo?

- A. Early hematopoiesis and nutrient transfer**
- B. Fetal urine production
- C. Hormonal support of the corpus luteum
- D. Production of amniotic fluid

6. On first-trimester sonography, the amnion is best described as which structure?

- A. A small round structure attached to the embryo by the vitelline duct
- B. A thin curvilinear membrane surrounding the embryo within the chorionic cavity**
- C. The outermost layer of decidua
- D. A thick echogenic ring around the gestational sac

7. The double decidual sac sign represents which anatomic finding?

- A. Two concentric echogenic rings around the gestational sac formed by the decidua parietalis and decidua capsularis**
- B. A gestational sac with two embryos
- C. Two layers of myometrium surrounding the sac
- D. Two yolk sacs within one gestational sac

8. An embryonic heart rate persistently below 90 beats per minute in the first trimester is most concerning for which outcome?

- A. Trisomy 21
- B. Multiple gestation
- C. Normal variation

D. Increased risk of pregnancy loss

9. Theca lutein cysts in a first-trimester patient are most commonly associated with which condition?

A. Gestational trophoblastic disease

- B. Threatened abortion
- C. Subchorionic hemorrhage
- D. Ectopic pregnancy

10. Absence of the fetal nasal bone on first-trimester sonography is most associated with which condition?

- A. Spina bifida
- B. Anencephaly
- C. Hydrocephalus
- D. Trisomy 21**

11. In the first trimester, which measurement is the most accurate for estimating gestational age?

- A. Mean sac diameter
- B. Crown-rump length**
- C. Biparietal diameter
- D. Femur length

12. Which sonographic finding best supports a diagnosis of monochorionic monoamniotic twin pregnancy in the first trimester?

A. Single gestational sac with two embryos and a single yolk sac

- B. Two embryos with the twin peak sign
- C. Two gestational sacs each with one yolk sac
- D. Single gestational sac with two yolk sacs

13. By what mean sac diameter should a yolk sac normally be visible with transvaginal sonography?

- A. 5 mm
- B. 8 mm**
- C. 16 mm
- D. 25 mm

14. Which finding is most specific for an interstitial (cornual) ectopic pregnancy?

- A. Empty uterus with a complex adnexal mass in the ampulla
- B. Centrally located gestational sac with surrounding decidua
- C. Eccentric gestational sac with less than 5 mm of surrounding myometrium and the interstitial line sign**
- D. Bilateral theca lutein cysts with elevated beta-hCG

15. In a pregnancy where the gestational sac is identified eccentrically within the endometrium rather than centrally, this eccentric position supports which diagnosis?

- A. Pseudogestational sac of ectopic pregnancy
- B. True intrauterine pregnancy**
- C. Cornual ectopic pregnancy
- D. Anembryonic pregnancy

16. The presence of a tubal ring with a yolk sac or embryo in the adnexa is most specific for which condition?

A. Ectopic pregnancy

- B. Hemorrhagic ovarian cyst
- C. Endometrioma
- D. Pelvic inflammatory disease

17. A first-trimester patient has an MSD of 30 mm with no visible yolk sac or embryo. What is the most likely diagnosis?

- A. Ectopic pregnancy with pseudogestational sac
- B. Subchorionic hemorrhage
- C. Normal early pregnancy
- D. Anembryonic pregnancy**

18. During a first-trimester transvaginal exam, you identify an intrauterine sac with no yolk sac at MSD 6 mm. What is the most appropriate next step?

A. Recommend follow-up sonography in approximately one to two weeks

- B. Discharge with no further imaging
- C. Diagnose ectopic pregnancy
- D. Diagnose anembryonic pregnancy

19. Which sonographic finding is typically the earliest reliable sign of an intrauterine pregnancy?

- A. Double decidual sac sign
- B. Intradecidual gestational sac**
- C. Yolk sac
- D. Embryo with cardiac activity

20. A snowstorm or cluster-of-grapes appearance in the uterine cavity with markedly elevated beta-hCG is most consistent with which condition?

- A. Anembryonic pregnancy
- B. Partial mole
- C. Complete hydatidiform mole**
- D. Subchorionic hemorrhage

21. A patient presents with a positive pregnancy test, vaginal bleeding, and a closed cervix. Sonography shows a live intrauterine pregnancy. What is the clinical diagnosis?

- A. Inevitable abortion
- B. Threatened abortion**
- C. Incomplete abortion
- D. Missed abortion

22. In a first-trimester twin pregnancy, identification of two separate placentas with the twin peak sign indicates which chorionicity and amnionicity?

- A. Conjoined twins
- B. Dichorionic diamniotic**
- C. Monochorionic monoamniotic
- D. Monochorionic diamniotic

23. Which structure typically forms the maternal side of the developing placenta?

- A. Decidua capsularis
- B. Decidua parietalis
- C. Chorion laeve
- D. Decidua basalis**

24. A patient with a positive pregnancy test and a beta-hCG of 3000 mIU/mL has no intrauterine gestational sac and a complex adnexal mass on transvaginal sonography. What is the most likely diagnosis?

- A. Ectopic pregnancy**
- B. Early intrauterine pregnancy
- C. Complete molar pregnancy
- D. Corpus luteum cyst

25. On transvaginal sonography, an empty gestational sac with a mean sac diameter of 25 mm or greater is diagnostic of which condition?

- A. Anembryonic pregnancy**
- B. Subchorionic hemorrhage
- C. Early intrauterine pregnancy
- D. Threatened abortion