

MULTIPLE CHOICE

OB PLACENTA CORD AND FLUID - 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. Which of the following is the most common clinical risk factor for placental abruption?

- A. Gestational diabetes
- B. Maternal hypothyroidism
- C. Maternal hypertension**
- D. Prior cesarean delivery

2. Which of the following is the most appropriate next step when a low-lying placenta is identified on a second-trimester scan?

- A. Recommend immediate cesarean delivery
- B. Cease prenatal ultrasound surveillance
- C. Diagnose placenta accreta
- D. Follow up with a third-trimester ultrasound to reassess the placental edge**

3. Which sonographic finding is most suggestive of placenta accreta?

- A. A thick uniformly hypoechoic retroplacental clear space
- B. Multiple irregular vascular lacunae within the placenta giving a moth-eaten or Swiss-cheese appearance**
- C. A homogeneous placenta with no internal cystic spaces
- D. Anterior placenta with smooth bladder-uterine interface

4. Which imaging maneuver is most useful when vasa previa is suspected?

- A. Transabdominal grayscale only, with a full bladder
- B. Transvaginal color Doppler over the internal cervical os**
- C. M-mode of the fetal heart
- D. Power Doppler over the fetal abdomen

5. A patient presents in the third trimester with painful vaginal bleeding and a tender uterus. Sonography shows a hypoechoic to mixed-echogenicity collection between the placenta and myometrium. The most likely diagnosis is:

- A. Retroplacental abruption**
- B. Placenta accreta
- C. Chorioangioma
- D. Complete placenta previa

6. A third-trimester scan demonstrates severe oligohydramnios with a small fetus, dilated bilateral renal pelves, and a distended bladder. The most likely cause of the oligohydramnios is:

- A. Esophageal atresia
- B. Fetal urinary tract obstruction**
- C. Chorioangioma
- D. Maternal diabetes

7. By the four-quadrant AFI method, polyhydramnios is most commonly defined as:

- A. AFI greater than 24 cm**
- B. AFI greater than 15 cm
- C. AFI greater than 18 cm
- D. AFI greater than 10 cm

8. Using the single deepest pocket technique, polyhydramnios is generally defined as a pocket of:

- A. 3 cm or greater
- B. 12 cm or greater
- C. 5 cm or greater

D. 8 cm or greater

9. On a transverse view of the fetal neck, color Doppler demonstrates the umbilical cord wrapped 360 degrees around the neck. This finding is best termed:

A. Nuchal cord

- B. Cord knot
- C. Vasa previa
- D. Cord prolapse

10. Why is recognition of a succenturiate lobe clinically important?

- A. It is a common cause of polyhydramnios
- B. It is a known precursor of trophoblastic disease
- C. It is strongly associated with placenta accreta

D. The connecting vessels may cross the internal os and create vasa previa, and the accessory lobe may be retained after delivery

11. Placenta percreta is best defined as:

A. Placental villi that adhere superficially to the myometrium without invasion

B. Placental villi that penetrate through the myometrium and may invade adjacent organs such as the bladder

- C. Placental villi that invade into but not through the myometrium
- D. Placental villi that implant in the lower uterine segment over the os

12. Which of the following maternal conditions is most likely to be associated with polyhydramnios?

A. Poorly controlled maternal diabetes mellitus

- B. Maternal anorexia
- C. Severe maternal hypertension with preeclampsia
- D. Chronic maternal renal failure

13. A placenta whose lower edge lies less than 2 cm from the internal os but does not cover it is best described as:

- A. Marginal previa
- B. Low-lying placenta**
- C. Complete previa
- D. Partial previa

14. Which of the following is the most accurate technique consideration when measuring the AFI?

- A. Include cord loops within the pocket to ensure accuracy
- B. Tilt the transducer to find the largest oblique pocket available in each quadrant

C. Hold the transducer perpendicular to the floor and measure the deepest vertical pocket in each quadrant, free of cord and fetal parts

- D. Measure only quadrants where the fetus is not present

15. Which of the following best explains why amniotic fluid volume drops in late-term and post-term pregnancies?

- A. Increased fetal swallowing only at term
- B. Declining placental function with reduced fetal renal perfusion**
- C. Closure of the foramen ovale before delivery
- D. Loss of the umbilical vein near term

16. On a normal three-vessel umbilical cord cross-section, the expected configuration is:

- A. Two arteries and one vein**
- B. One artery and two veins
- C. One artery and one vein
- D. Two arteries and two veins

17. Which of the following is a recognized cause of polyhydramnios?

- A. Premature rupture of membranes
- B. Severe placental insufficiency
- C. Bilateral renal agenesis
- D. Fetal duodenal atresia**

18. Painless, bright-red vaginal bleeding in the third trimester with a soft, nontender uterus is most characteristic of which condition?

A. Placenta previa

- B. Placenta accreta
- C. Vasa previa with intact membranes only
- D. Placental abruption

19. Which finding best defines a complete placenta previa on transabdominal ultrasound?

- A. Placenta implants in the lower uterine segment but well above the os
- B. Placental tissue completely covers the internal cervical os**
- C. Placental edge lies within 2 cm of the internal os but does not cover it
- D. Placental edge just reaches the internal os without overlap

20. Velamentous cord insertion is best described as:

- A. Insertion of the cord within 2 cm of the placental edge
- B. Insertion of the cord directly into the center of the placental disc
- C. Insertion of the umbilical cord into the fetal membranes away from the placental edge, with vessels running unprotected through the membranes to the placenta**
- D. Insertion of the cord into an accessory placental lobe

21. Vasa previa is best defined as:

- A. Placental tissue covering the internal os
- B. Fetal vessels that traverse the membranes overlying the internal cervical os, unsupported by placenta or cord**
- C. Maternal vessels in the lower uterine segment that may bleed at delivery
- D. Umbilical cord insertion within 2 cm of the placental edge

22. A second-trimester scan demonstrates the umbilical cord inserting into the fetal membranes about 5 cm away from the placental disc, with vessels coursing through the membranes toward the placenta and a low-lying placenta. The greatest concern raised by this combination is:

- A. Bilateral renal agenesis
- B. Vasa previa from membrane-borne vessels crossing the internal os**
- C. Chorioangioma
- D. Placenta accreta

23. Which finding is most characteristic of a circumvallate placenta and helps distinguish it from a normal placenta?

- A. A small accessory placental lobe connected by vessels
- B. A discrete hypoechoic mass with internal flow on the fetal surface
- C. Loss of the retroplacental hypoechoic zone
- D. A rolled, thickened edge of placental tissue forming a peripheral ridge on the fetal surface**

24. A large chorioangioma is most strongly associated with which of the following pregnancy complications?

- A. Polyhydramnios and fetal hydrops**
- B. Oligohydramnios from renal agenesis
- C. Maternal hypertension from accreta
- D. Microcephaly from intracranial calcifications

25. Which of the following is the most important risk factor for placenta accreta spectrum?

- A. Prior cesarean delivery in a patient with placenta previa**
- B. Twin gestation
- C. Advanced maternal age alone
- D. Polyhydramnios