

MULTIPLE CHOICE

OB BIOMETRY AND GROWTH - PRACTICE SET

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 finding indicates the correct plane for fetal abdominal circumference?

- A. The full intra-abdominal umbilical vein is seen extending to the anterior abdominal wall
- B. Both kidneys and the bladder are visualized in the same image
- C. The cord insertion into the abdomen is clearly seen
- D. The umbilical portion of the left portal vein appears as a short J-shape and does not reach the anterior abdominal wall

2. Reliable interval growth between two sonograms is best demonstrated by:

- A. A single estimated fetal weight at the 5th percentile
- B. An appropriate increase in estimated fetal weight along the same percentile curve over at least 2 weeks
- C. Stable biometry without change over 1 week
- D. An increase in amniotic fluid index alone

3. A fetal head shape that is short and wide, producing a falsely small BPD and a falsely large occipitofrontal diameter, is termed:

- A. Dolichocephaly
- B. Brachycephaly
- C. Microcephaly
- D. Macrocephaly

4. A third-trimester fetus has a normal head circumference but a small abdominal circumference, with an elevated HC/AC ratio. This pattern is most consistent with:

- A. Asymmetric intrauterine growth restriction
- B. Macrosomia
- C. Skeletal dysplasia
- D. Symmetric intrauterine growth restriction

5. At which anatomic plane is the fetal abdominal circumference (AC) correctly measured?

- A. Axial plane at the level of the cord insertion into the abdomen
- B. Axial plane showing the stomach and the portal sinus (umbilical portion of the left portal vein) with a short rib segment on each side
- C. Coronal plane through the diaphragm and bladder
- D. Axial plane at the level of the kidneys

6. Which technical error most commonly causes a falsely large femur length measurement?

- A. Including the cartilaginous distal femoral epiphysis in the caliper placement
- B. Imaging the femur parallel to the beam
- C. Measuring the femur of the dependent (down) leg only
- D. Excluding both ends of the ossified diaphysis

7. Which fetal long-bone biometric parameter is the most commonly used secondary parameter when the femur cannot be measured accurately?

- A. Ulna length
- B. Clavicle length
- C. Tibia length
- D. Humerus length

8. Sonographic findings that support a diagnosis of fetal macrosomia include:

- A. Elevated estimated fetal weight, large abdominal circumference, and polyhydramnios

- B. Symmetrically reduced biometry across all parameters
- C. Elevated HC/AC ratio and normal amniotic fluid
- D. Small abdominal circumference and oligohydramnios

9. Absent or reversed end-diastolic flow in the umbilical artery is most concerning for:

- A. Twin-to-twin transfusion in the recipient twin
- B. Normal late-third-trimester physiology
- C. Fetal macrosomia
- D. Severe placental insufficiency with high risk of fetal compromise

10. The standard sonographic estimated fetal weight (EFW) is most commonly calculated from which combination of measurements?

- A. BPD and AC only
- B. BPD, HC, AC, and FL
- C. AC and FL only
- D. HC and AC only

11. The cephalic index is calculated as:

- A. BPD divided by occipitofrontal diameter, multiplied by 100
- B. Head circumference divided by abdominal circumference, multiplied by 100
- C. Occipitofrontal diameter divided by BPD, multiplied by 100
- D. BPD divided by head circumference, multiplied by 100

12. How is the head circumference traced when measured with an ellipse caliper?

- A. Around the inner perimeter of the calvarium
- B. Around the outer perimeter of the calvarium
- C. Around the skin surface of the fetal head
- D. Through the midline echo of the falx

13. A fetus measures small overall, with proportionally reduced head, abdomen, and limbs. This pattern is most consistent with which type of growth restriction?

- A. Constitutionally small for gestational age with normal interval growth
- B. Asymmetric intrauterine growth restriction
- C. Symmetric intrauterine growth restriction
- D. Macrosomia

14. At which anatomic level is the biparietal diameter (BPD) correctly measured?

- A. Axial plane at the level of the lateral ventricles and choroid plexus
- B. Axial plane at the level of the thalami and cavum septi pellucidi
- C. Coronal plane through the orbits and nasal bones
- D. Axial plane at the level of the cerebellum and cisterna magna

15. In standard composite gestational age estimation, which set of biometric parameters is most commonly combined?

- A. BPD, HC, AC, and FL
- B. BPD, AC, and humerus length
- C. HC, AC, FL, and cerebellar diameter
- D. Crown-rump length, BPD, and AC

16. Which first-trimester measurement is the most accurate parameter for assigning gestational age?

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

17. Which estimated fetal weight percentile is the most widely used sonographic threshold for diagnosing a small-for-gestational-age or growth-restricted fetus?

- A. Below the 10th percentile for gestational age
- B. Below the 3rd percentile for gestational age
- C. Below the 25th percentile for gestational age
- D. Below the 50th percentile for gestational age

18. Which sonographic finding, in addition to abnormal biometry, supports a diagnosis of intrauterine growth restriction rather than constitutional smallness?

- A. Increased subcutaneous fat on the fetal abdomen
- B. Oligohydramnios
- C. Polyhydramnios
- D. Normal amniotic fluid volume

19. Once a reliable estimated due date has been established in the first trimester by crown-rump length, how should later third-trimester biometry that disagrees with that date be handled?

- A. The due date should be averaged with the third-trimester biometric age
- B. The due date should be reassigned to match third-trimester biometry
- C. The first-trimester due date is not changed; later biometry is used to assess growth, not to redate the pregnancy
- D. The due date should be reassigned only if the discrepancy is less than one week

20. Which statement best describes how the HC/AC ratio changes with normal gestational age?

- A. The HC/AC ratio remains constant throughout pregnancy
- B. The HC/AC ratio is greater than 1 in the early second trimester and falls to approximately 1 near term as the abdomen grows relative to the head
- C. The HC/AC ratio rises throughout pregnancy as the head outgrows the abdomen
- D. The HC/AC ratio is always less than 1 from the second trimester onward

21. In a third-trimester fetus of a poorly controlled diabetic mother, which biometric pattern is most expected?

- A. Short femur length with otherwise normal biometry
- B. Large AC relative to HC, with elevated estimated fetal weight and polyhydramnios
- C. Symmetrically small biometry across all parameters
- D. Small AC with brain-sparing pattern

22. Which maternal condition is most commonly associated with fetal macrosomia?

- A. Chronic maternal hypertension
- B. Maternal smoking
- C. Severe preeclampsia
- D. Poorly controlled maternal diabetes mellitus

23. The cavum septi pellucidi is a key landmark for which of the following measurements?

- A. BPD and head circumference
- B. Cerebellar diameter and cisterna magna
- C. Lateral ventricle atrial width
- D. Nuchal fold thickness

24. At which anatomic landmarks is the femur length correctly measured?

- A. Long axis of the ossified diaphysis from one end of the shaft to the other, excluding the distal femoral epiphysis
- B. Oblique image of the femur to capture maximum length
- C. Long axis of the diaphysis including the distal femoral epiphysis
- D. Long axis of the diaphysis including both the femoral head and the distal epiphysis

25. To assess interval fetal growth on serial sonograms, the minimum interval generally recommended between examinations is:

- A. At least 1 week
- B. At least 6 weeks
- C. At least 3 days
- D. At least 2 weeks