

Essentials of Sonographic Image Interpretation

REVIEW OF SONOGRAPHIC VOCABULARY TERMS

Match the following terms with their definitions

KEY TERMS

1. _____ echogenicity
2. _____ anechoic
3. _____ hyperechoic
4. _____ hypoechoic
5. _____ isoechoic
6. _____ focal
7. _____ diffuse
8. _____ cystic
9. _____ solid
10. _____ complex

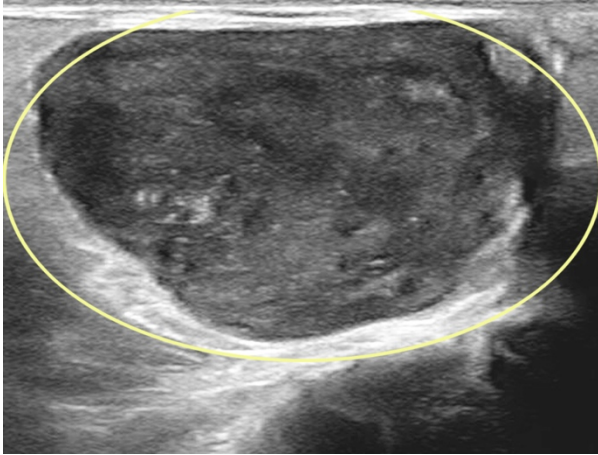
DEFINITIONS

- a. echo producing structure that may have iso-, hypo-, or mixed appearance
- b. discrete, well-marginated areas of differing echogenicity
- c. increased echo level compared to adjacent tissue
- d. the same echo level as adjacent tissue
- e. the ability of a structure to produce echoes
- f. structure containing both solid and cystic components
- g. indistinct, poorly marginated areas of differing echogenicity
- h. decreased echo level compared to adjacent tissue
- i. absence of echoes within a structure
- j. anechoic, fluid-filled structure with posterior acoustic enhancement

IMAGE LABELING

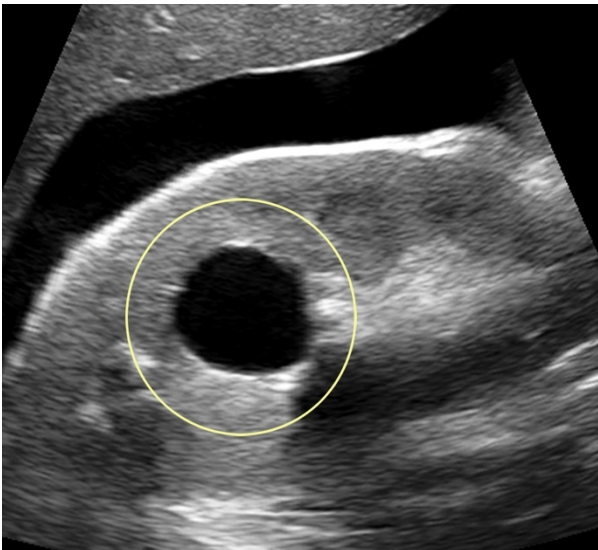
Choose the sonographic characteristics that apply to the circled area in this image

IMAGE 1



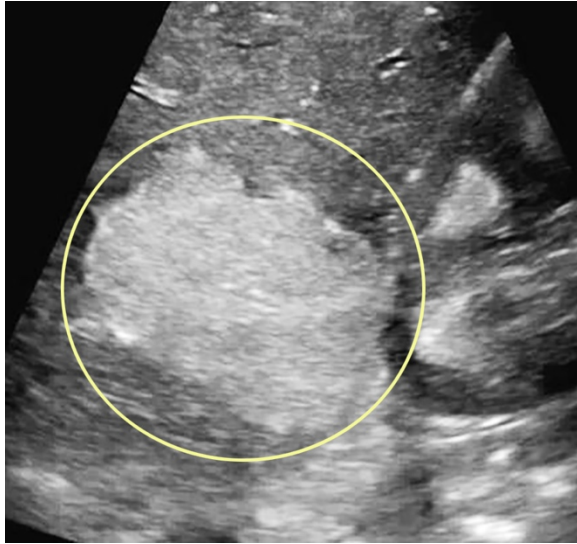
- a. ____ anechoic
- b. ____ poorly marginated
- c. ____ smoothly marginated
- d. ____ homogeneous
- e. ____ heterogeneous
- f. ____ cystic
- g. ____ solid

IMAGE 2



- a. ____ anechoic
- b. ____ poorly marginated
- c. ____ smoothly marginated
- d. ____ homogeneous
- e. ____ heterogeneous
- f. ____ cystic
- g. ____ solid

IMAGE 3



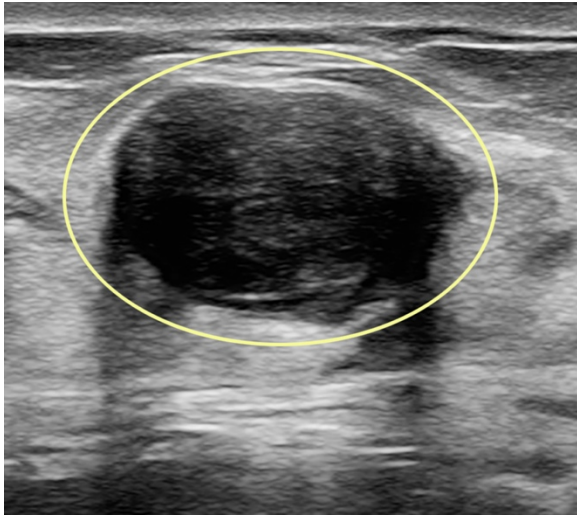
- a. ____ hypoechoic
- b. ____ hyperechoic
- c. ____ smoothly margined
- d. ____ irregularly margined
- e. ____ complex
- f. ____ cystic
- g. ____ solid

IMAGE 4



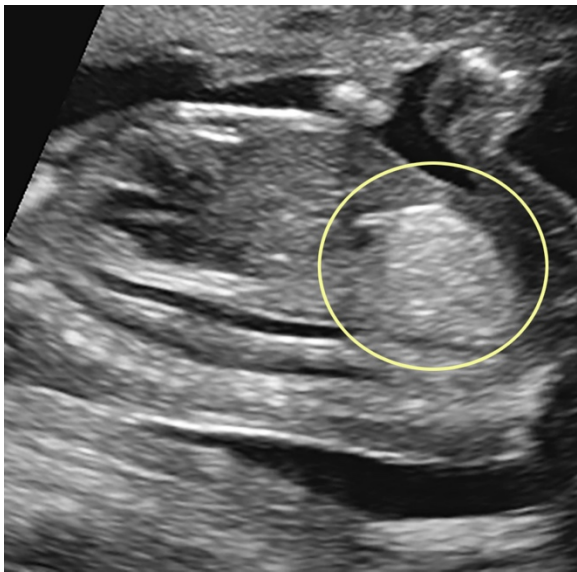
- a. ____ hypoechoic
- b. ____ homogeneous
- c. ____ heterogeneous
- d. ____ smoothly margined
- e. ____ irregularly margined
- f. ____ cystic
- g. ____ complex

IMAGE 5



- a. ____ hypoechoic
- b. ____ hyperechoic
- c. ____ smoothly marginated
- d. ____ irregularly marginated
- e. ____ cystic
- f. ____ solid
- g. ____ complex

IMAGE 6



- a. ____ hypoechoic
- b. ____ hyperechoic
- c. ____ smoothly marginated
- d. ____ irregularly marginated
- e. ____ cystic
- f. ____ solid
- g. ____ complex

FILL-IN-THE BLANKS

1. Assessment of the sonographic morphology of a structure consists of an analysis of _____, _____, and _____.
2. Assessment of the acoustic physical interactions seen in a structure consists of an analysis of _____, _____, and _____.
3. Sonographic structures _____ refers to the overall are generally classified as _____, _____, _____.
4. _____ refers to the overall appearance of an anatomic organ or pathologic structure.
5. The global sonographic appearance of a structure consists of its external boundaries and shape _____ and its interior architecture _____.
6. The _____ of a structure refers to its shape, outline, or boundaries.
7. Contour boundaries of a sonographic structure can be described as _____, _____, _____, _____.
8. The relative amplitude of the internal echo pattern is called _____.
9. A mass that is more echogenic than its surrounding tissue is called _____.
10. A mass that is less echogenic than its surrounding tissue is called _____.
11. A mass that has the same echogenic than its surrounding tissue is called _____.
12. A synonym for hypoechoic is _____.
13. A structure that does not contain any echoes at all is called _____.
14. A synonym for anechoic is _____.
15. A structure that contains a mix of hyperechoic and hypoechoic areas, would be described as _____.
16. A structure that appears uniformly echogenic, either hypoechoic or hyperechoic, is described as _____.
17. Alterations in sonographic appearance are dispersed evenly throughout a structure and typically represent histological changes that affect the entire organ are described as _____.

18. A sonographic finding that describes a region in a solid structure that is discrete, well-marginated and of differing echogenicity than that of the surrounding tissue is referred to as _____.
19. _____ is the decrease in amplitude and intensity of a sound wave as it is transmitted through a medium.
20. If there is an excessive loss of acoustic energy as it propagates through a tissue bed it is described as being highly attenuative or _____.
21. The notable characteristic, then, of hyperattenuating structures is that they appear _____ on a grayscale image.
22. An exaggerated manifestation of hyperattenuation is a phenomenon called _____.
23. The most common source of a posterior acoustic shadow is the presence of _____ in the tissue.
24. _____ is a physical phenomenon opposite to posterior acoustic shadowing.
25. Posterior acoustic enhancement is strong evidence of the presence of a _____.
26. _____ are a variant of conventional reverberation artifacts that originate from small, highly reflective interfaces that are too closely spaced to be resolved individually.
27. _____ artifacts result from an acoustic wavefront encountering small air bubbles trapped within a fluid collection.
28. Fluid-filled structures are called _____.
29. Classic sonographic characteristics of a simple cystic structure include _____, _____, and _____.
30. Echoes identified in solid structures typically result from _____.
31. _____ are generally described as containing both cystic and solid elements.