

Supplementary Appendix S1—Written tests for experiment 1 regarding ultrasonography of the palmar metacarpal region in horses and experiment 2 regarding FLASH.

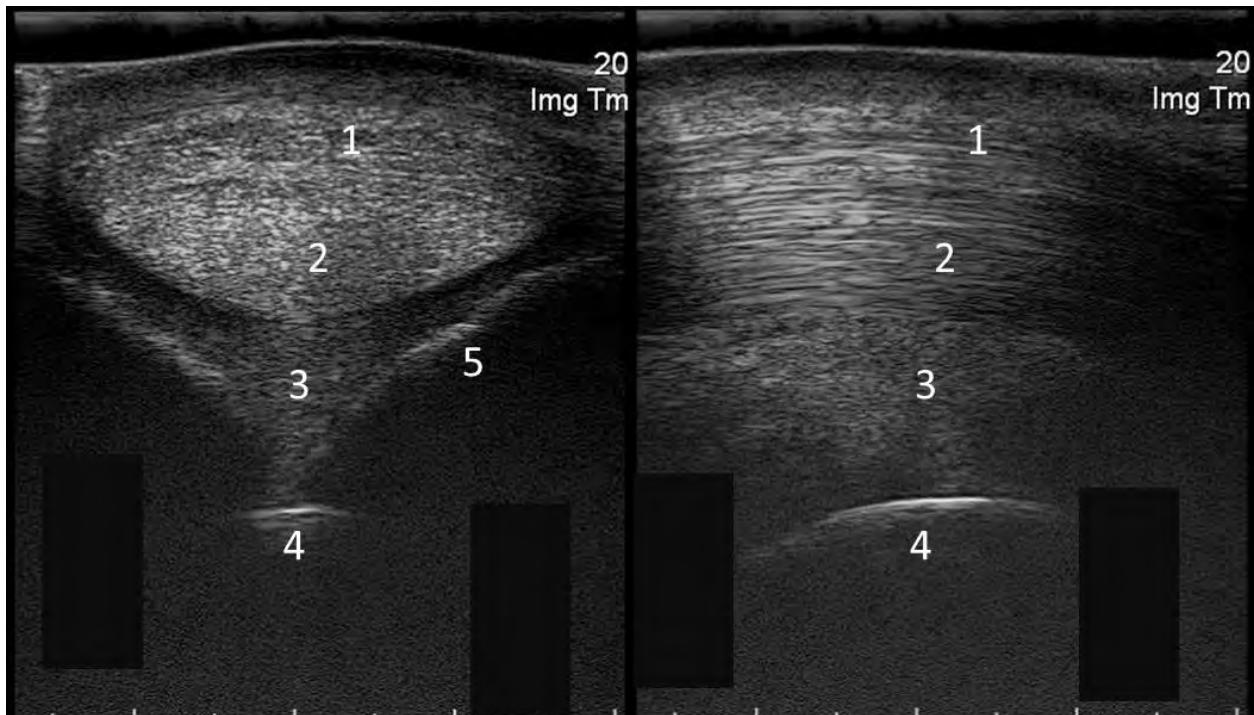
Participant #: _____

Experiment #1 – Palmar Metacarpal Sonography

The following images were obtained from a 500-kg Thoroughbred horse.

1a. From which zone or distance to the accessory carpal bone are these images obtained?

1b. What anatomical structures correspond to numbers 1 through 5 in the image on the left?



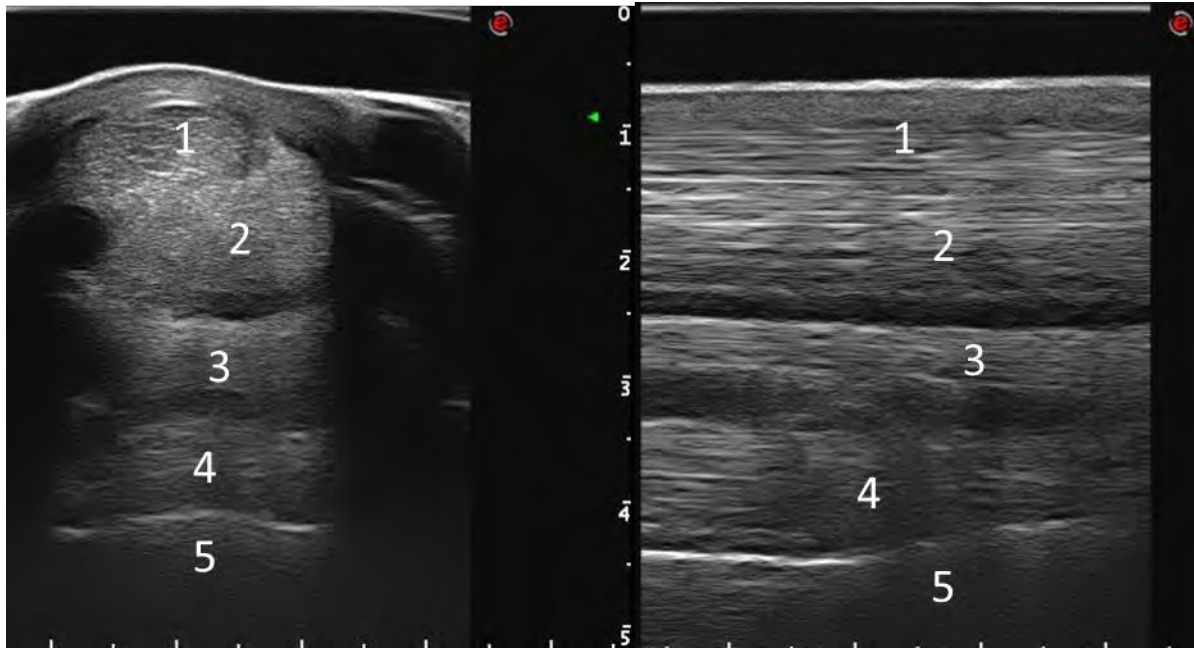
1a. _____

- 1b.**
- 1. _____
 - 2. _____
 - 3. _____
 - 4. _____
 - 5. _____

The following images were obtained from a 500-kg Thoroughbred horse.

2a. From which zone or distance to the accessory carpal bone are these images obtained?

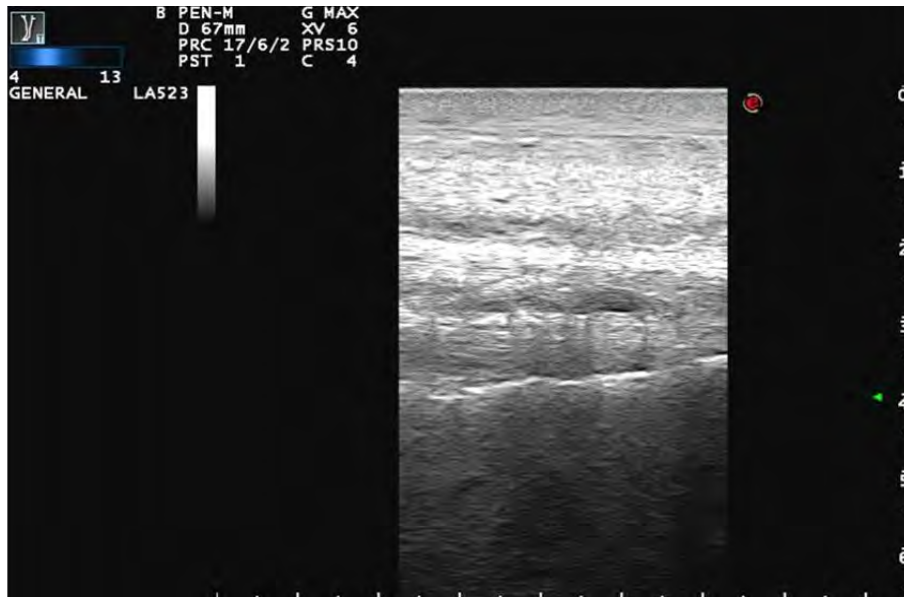
2b. What anatomical structures correspond to numbers 1 through 5?



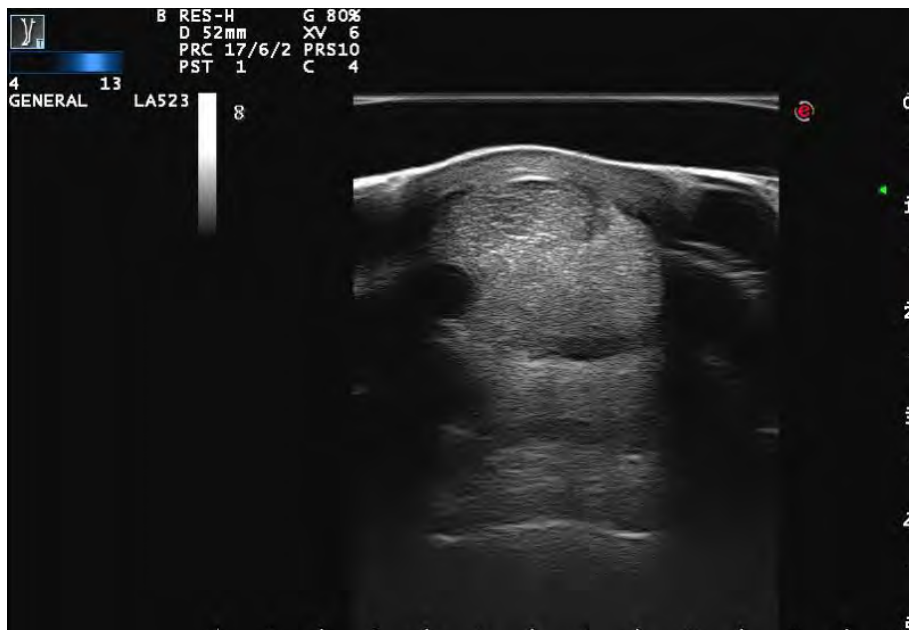
2a. _____

- 2b.**
- 1. _____
 - 2. _____
 - 3. _____
 - 4. _____
 - 5. _____

3. To improve image quality, what would you adjust if you are evaluating the SDFT?

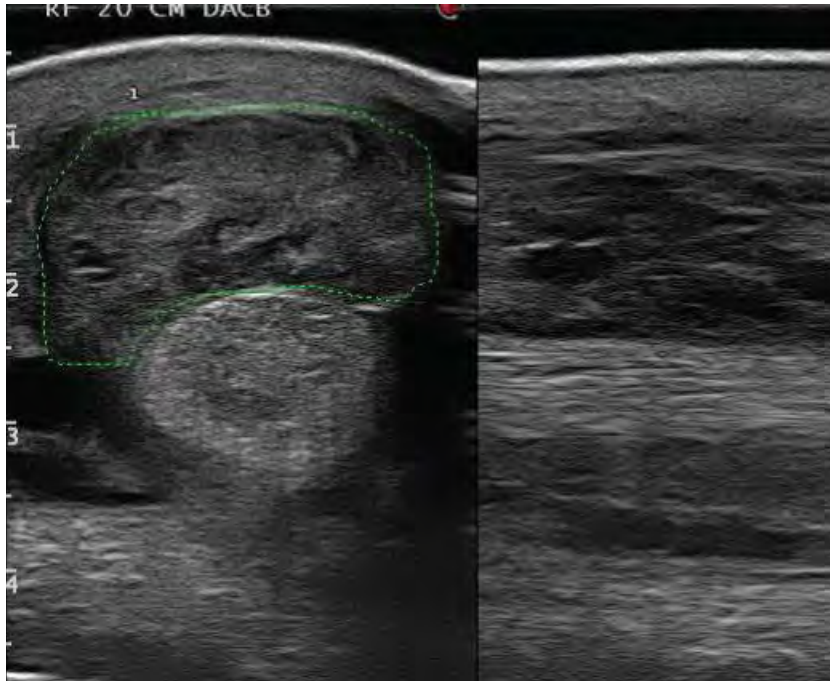


4. If you are imaging the suspensory ligament, which setting will need to be adjusted to improve the image quality of the image below?



5a. Which structure has the most severe lesion?

5b. Describe the abnormalities in the soft tissue structure that is abnormal in this sonogram.

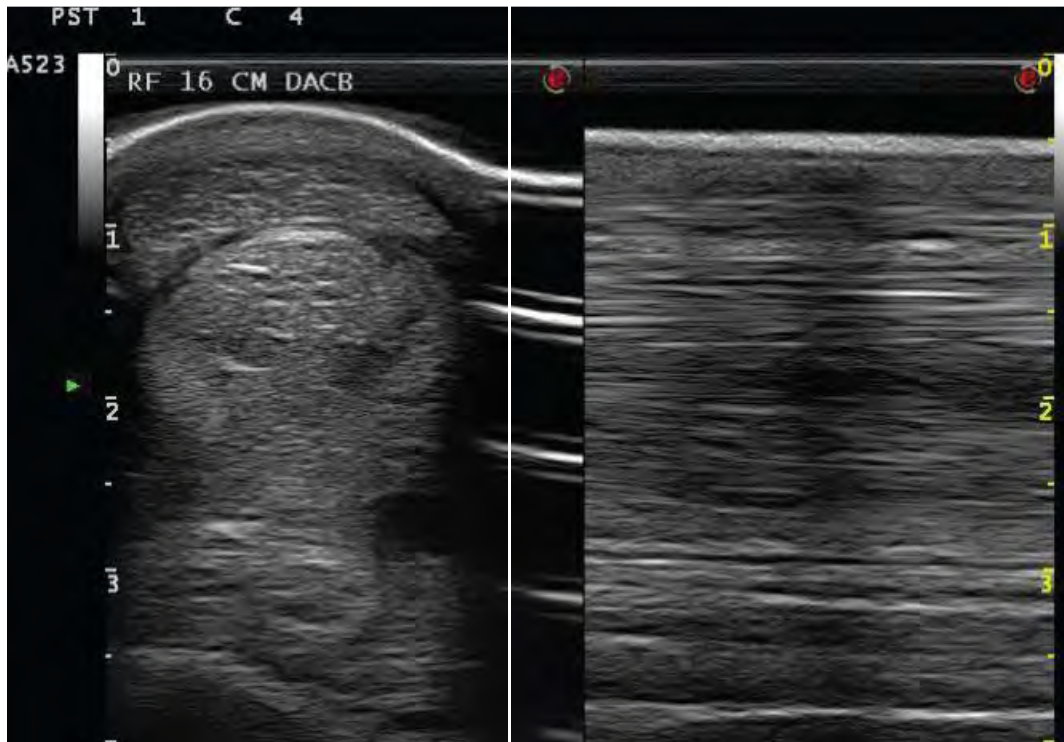


Please answer question 5a in the space below.

Please answer question 5b in the space below.

6a. Which structure has the most severe lesion?

6b. Describe the abnormalities in the soft tissue structure that is abnormal in this sonogram.



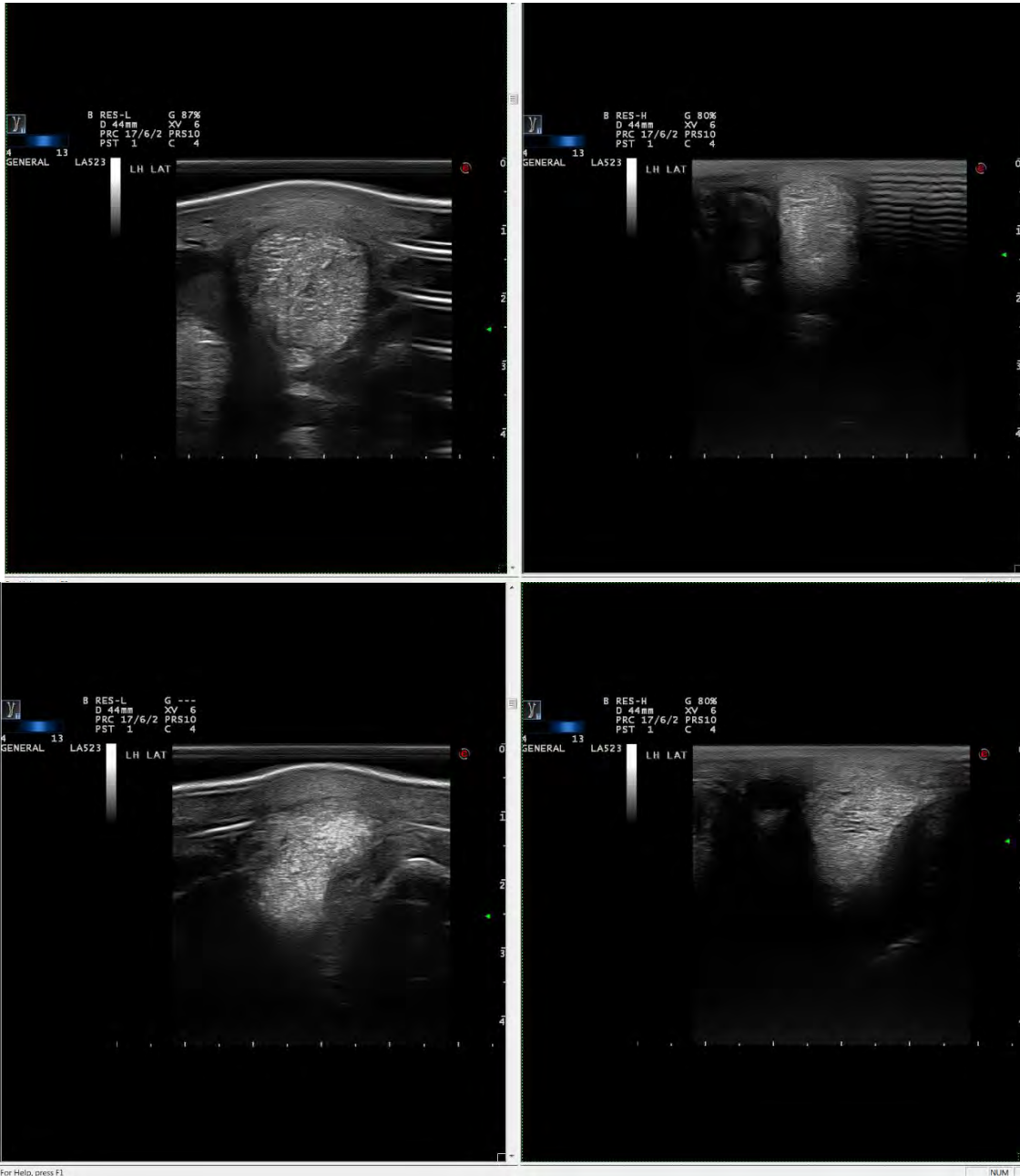
Please answer question 6a in the space below.

Please answer question 6b in the space below.

These four images, taken from the same horse, were obtained from the lateral aspect of the distal cannon bone. The horse is being monitored for desmitis. The two images on the right are the original images and were taken 2 months before the images on the left.

7a. Should the horse be allowed to continue/progress in the rehabilitation program (Y or N)?

7b. Describe what you see in the images on the left.



Please answer question 7a in the space below (yes or no). _____

Please answer question 7b in the space below (you may use the back of page if necessary).

Experiment #2 – Fast Localized Abdominal Sonography (FLASH)

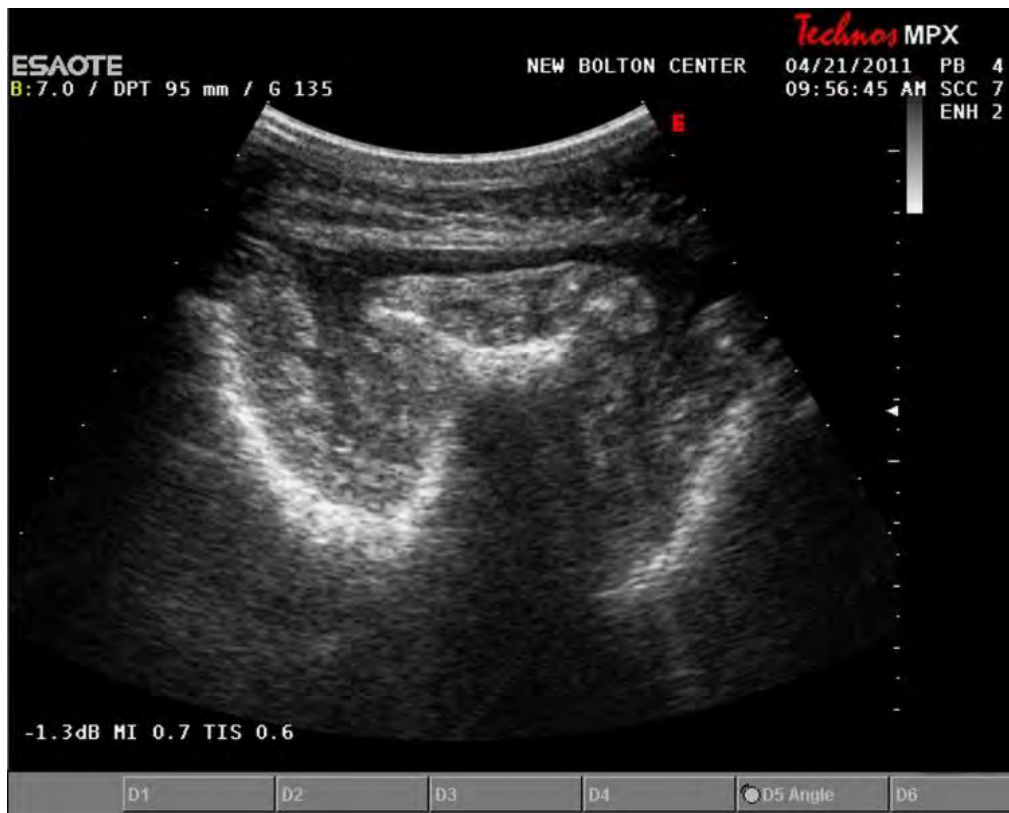
Remember that in all images, dorsal or lateral is to the right side of the screen

1. The following image was obtained from a ventral abdominal window of a 6-year-old Quarter Horse mare.

1a. What anatomical structure is most prominent in this image?

1b. Describe the abnormal findings.

1c. Give two likely differential diagnoses.



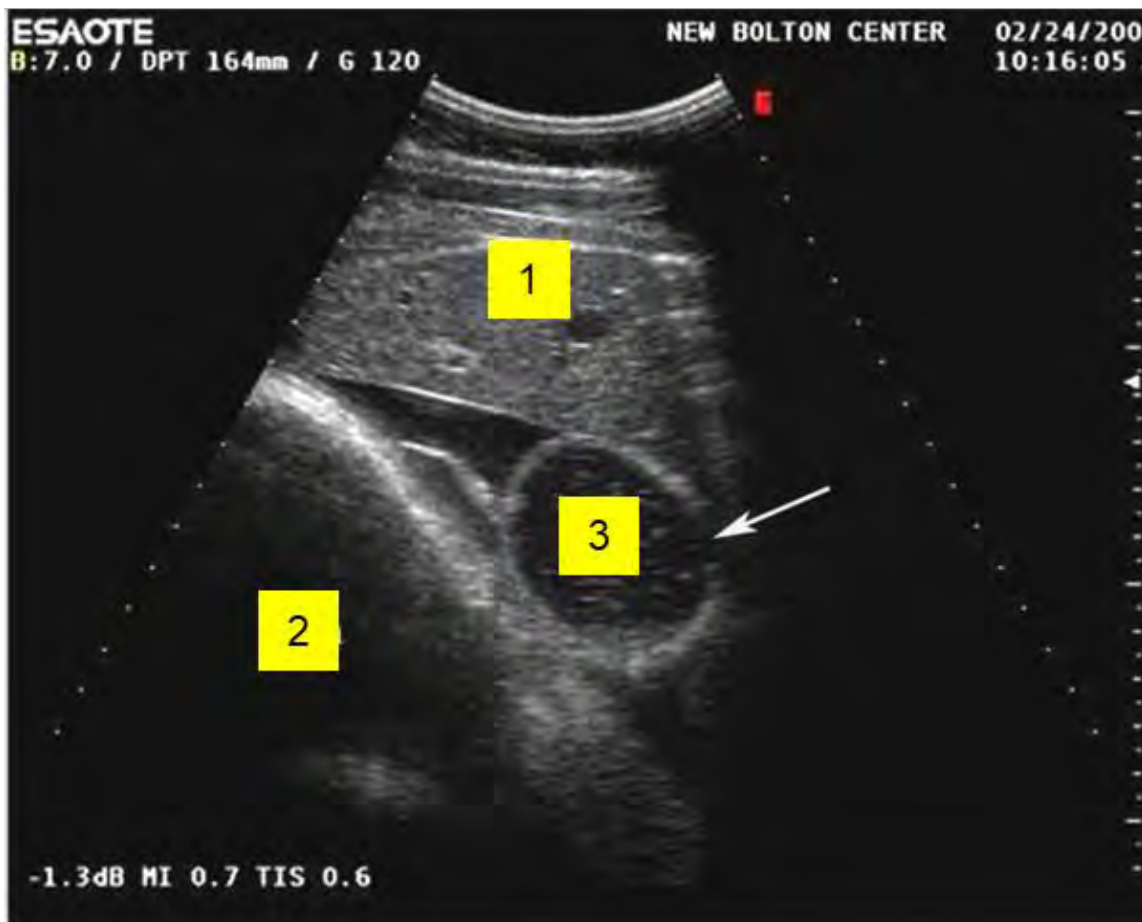
2. The image below was obtained from was obtained from an adult Thoroughbred horse.

Name the anatomical structures marked by the numbers 1, 2, and 3.

1. _____

2. _____

3. _____



3. This image was obtained from a 12-year-old Standardbred gelding. The image was obtained from the dorsal aspect of the left 16th intercostal space.

Which of the following statements is true?

- a. The left kidney is visible in its normal position.
- b. The colon is dorsal to the spleen and the dorsal edge of the spleen is not visible.
- c. The large intestine is severely thickened and filled with a large amount of hypoechoic fluid.
- d. The spleen is heteroechoic and enlarged.



4. This image was obtained from the right paralumbar fossa of a 2-year-old Paint horse.

The yellow arrow points to what anatomical structure? _____



5. These two images were obtained from 2 different adult horses with acute colic. Which image is more likely to belong to a horse that required an exploratory laparotomy? Circle the correct answer.

- a. The image marked A (left)
- b. The image marked B (right)

