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Advanced GI topographical Model

Instructions:

1. Refamiliarize yourself with the 3D GI model. **Note: this is the same model you used last week to create the root of the mesentery, various straightaways and flexures found in the GI tract.*
2. The 3D GI model this week has accessories. These represent various abdominal organs, to include:

□ Liver

□ Gallbladder

□ Mesenteric lymph nodes

□ Right & left kidney

□ Right and left adrenal glands

□ Pancreas

□ Greater & lesser omentum

□ Spleen

□ Urinary Bladder/ ureters

3. Identify these organs.
4. Adhere the kidneys, ureters, urinary bladder and adrenal glands to the board.
5. Use Press'n Seal ® over the kidneys and adrenal glands to make them retroperitoneal.
6. Build the root of the mesentery and colon as you did last week and secure onto the board.
7. Tear off a 3-foot-long section of Press'n Seal ® and place sticky side up on the table.
8. Attach the greater omentum 3 inches from one end on the Press'n Seal ®.
9. Attach the 3-inch end of the Press'n Seal ® representing the deep leaf of the greater omentum to the dorsal body wall cranial to the root of the mesentery, Fold back along itself to create the superficial and deep leaf with omental bursa.
10. Insert the spleen into its correct location near the stomach (see figure 7-35 in resources).
11. Arrange the left lobe of the pancreas into the correct position along the greater curvature of the stomach.
12. Attach the superficial leaf to the greater curvature of the stomach.
13. Continue adhering the Press'n Seal ® to the ventral/lateral surface of the stomach.
14. Create the lesser omentum by crossing to the liver and attaching it up and around the liver.
15. Arrange the structures so they are in the correct topographic position.

Congratulations! You have assembled the advanced GI model!

Orient yourself. This model is positioned in dorsal recumbency. Determine cranial and caudal, ventral and dorsal, and the model's left and right sides. Reflect upon what you know and understand about the topography of the abdomen. Is there one structure or organ that stands out in your mind as the one item you can always identify & locate- despite varying orientations? Going forward, that structure or organ will be referred to as your anchor. Use your model to complete the following:

1. Go on a scavenger hunt to locate the internal organs listed above.
2. Describe out loud to your teammates how each organ is oriented in relation to your anchor.
3. Switch roles until each person has described their anchor and oriented each of the organs above to their anchor.
4. Reflect upon whether each of you uses the same anchor. Discuss differences or why you choose that anchor.
5. Reflect upon whether you employ a different anchor if you were performing abdominal palpation, abdominal ultrasound, abdominal surgery or looking at an abdominal radiograph. Why might it change? Discuss.
6. Place a towel over the model to obscure contents. “Perform: a virtual abdominal ultrasound on the model. From superficial to deep, describe all the structures the ultrasound waves would encounter as you move the probe around the abdomen.
7. Using anatomic language, specifically describe where you would place the probe to scan each organ (medial, lateral, cranial, caudal, ventral, dorsal, left, right, etc.).
8. Study the right lateral view of GI topography image below. Get oriented. Follow the flow of ingesta through the GI tract labeling all the parts. Think about the 3-dimensionality of the GI tract in a standing patient, as is represented in this view.