

**DATE PRESENTING CLINICAL SIGNS**

1/25/23 Bad breath, thought to be tooth issue. Radiographs revealed excessive amount of stool. Dr. Chrest suspects a blockage of some kind.

PATIENT

Annie Husson

Current Medications: Phenylpropanolamine (Proin) 50mg ½ BID, Apoquel 16 & 3.6mg ½ BID-SID PRN.

Lab Results: Liver values elevated.

Radiographs: See attached.

SPECIES

Canine

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Stephanie Warga RDCS, RVT.

BREED

Chesapeake Retriever

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX**

Spayed Female

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

AGE

6/1/09

The left kidney has a normal shape and size (5.51 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

WEIGHT

40.4 Pounds

The right kidney has a normal shape and size (5.76 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

INTERPRETED BY

Kathleen Sennello DVM,
MS, Diplomate ACVIM
(Small Animal Internal
Medicine)

Adrenal Glands

The left adrenal gland is normal in size measuring 0.93 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

HOSPITAL NAME

AMC of Dulaney Valley

The right adrenal gland is normal in size measuring 0.56 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

REFERRING VET

Dr. Chrest

Spleen

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

INVOICE

44513

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measures 0.37 cm. Duodenum wall measures 0.41 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The region of the ileocecal junction is obscured by a large amount of stool in the descending colon. This is associated with a focal section of large intestine with severe wall thickening and loss of layering, creating a mass effect. This mass effect measures 2.32 cm x 3.04 cm, and the wall thickness in this region measures 2.4 cm, creating an obstructive process, as there is little to no stool distal to this mass lesion.

Pancreas

The pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is slightly hyperechoic around the abnormal colon.

ULTRASONOGRAPHIC FINDINGS

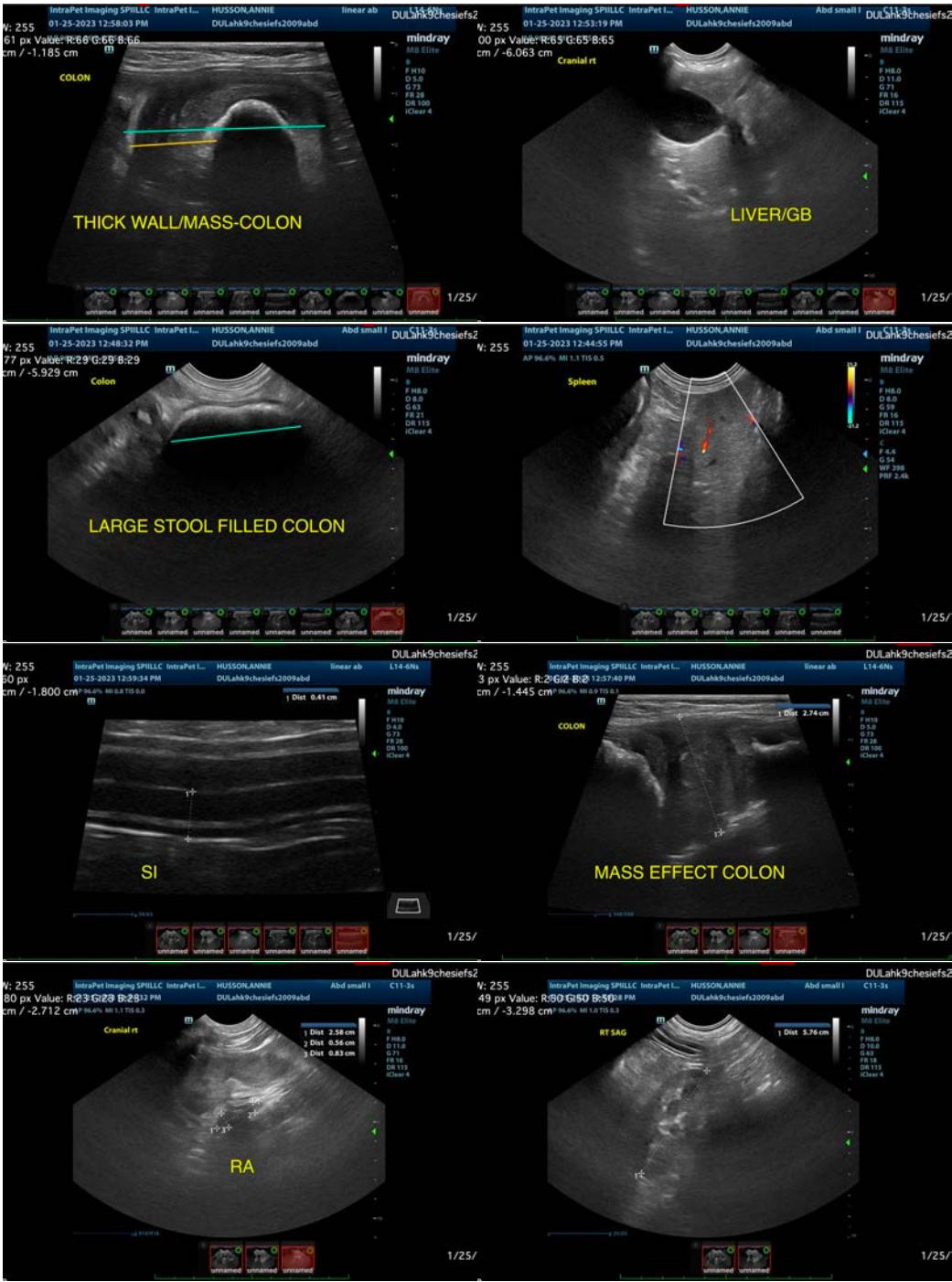
- Heterogeneous liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.
- Moderate gallbladder debris – The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting but seems unlikely to be causing a current issue. Recommend continued monitoring.
- Focal thickening/mass effect of the colon with complete loss of layering and a complete to partial large bowel obstruction – Most likely differentials would include round cell neoplasia, carcinoma, other. Some benign etiologies are possible. Recommend a fine needle aspirate.

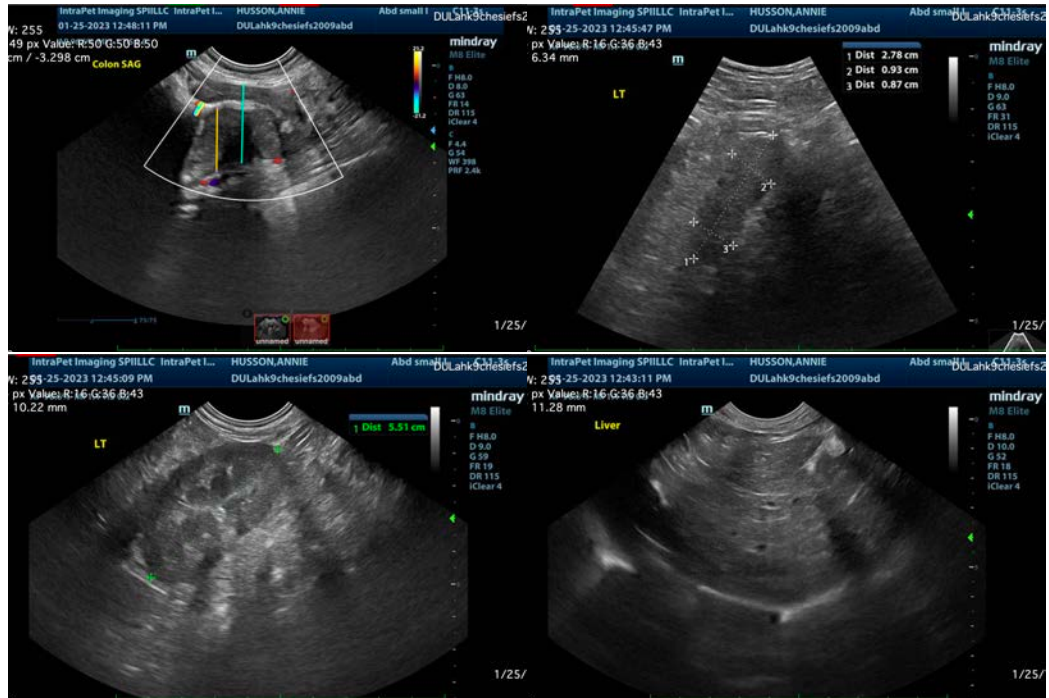
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a large mass effect that is causing a partial to complete colonic obstruction with a large amount of stool distending the colon oral to the lesion. A fine needle aspirate of this thickened mass effect is recommended, looking for a cytologic diagnosis. Likely differentials are neoplastic (round cell neoplasia, carcinoma, etc.), although benign mass lesions and even granulomatous disease, etc. are possible. Additionally, surgical resection of this lesion could be possible, although colonic surgery can have a high complication rate. You could consider stool softeners, etc., but I suspect surgical intervention would be necessary to relieve the obstruction.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.

The liver is somewhat heterogeneous. This is a non-specific finding. No focal lesions are observed.





The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
 kathleen.sennello@sonopath.com