

**DATE PRESENTING CLINICAL SIGNS**

4/7/23 Vomiting for 3 days. Radiographs concerning for enlarged R kidney, possible chest mass.

PATIENT

Calvin Krista

Current Medications: None listed.
 Date of Previous IntraPet Ultrasound: No previous.
 Sedation: Not required to complete full diagnostic ultrasound.
 Stat Report: Not requested.
 Imaging Performed By: Rachel Brillhart, RDMS.

SPECIES

Feline

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**BREED**

DSH

SEX

Neutered Male

AGE

4/1/13

WEIGHT

10 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Homeward Bound

REFERRING VET

Dr. Sorum

INVOICE

46448

Urinary System

The urinary bladder is moderately distended with mild primarily suspended echogenic debris and some dependent shadowing/sandy debris present. 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 calculi. Echogenic debris of this type can be associated with small crystals, sandy debris or small calculi. Correlate findings with abdominal radiographs, urinalysis and culture.

The left kidney has a normal shape and size (4.03 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.

The right kidney has a normal shape and size (4.12 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.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.28 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.

The right adrenal gland is normal in size measuring 0.36 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.

Spleen

The spleen is normal in size but irregular in shape, measuring 0.78 cm in width at the level of the hilus. The blood flow through the hilus and splenic parenchyma appears normal. There is a subtle slightly hypoechoic ill-defined nodule visualized within the body of the spleen measuring 1.21 cm x 1.04 cm. This mass effect deforms the splenic capsule.

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. 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 <0.36cm 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.

Many of the areas of duodenum, jejunum and ileum have a uniform diameter with minimal fluid distension. Wall thickness is normal to slightly increased. Bowel loops follow a typical curvilinear path with distinct wall layering, but some areas display a prominent muscularis layer which does not display the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measures 0.21 cm. Visualized peristalsis appears appropriate. There are two areas of small bowel where the wall is observed to be asymmetrically/focally severely thickened with complete loss of layering, creating a mass effect. One lesion appears to be in the cranial abdomen. The bowel diameter in this region is 1.7 cm. The asymmetrical, thickened bowel wall is 0.90 cm in thickness. A 2nd abnormal area is visualized in the caudal abdomen with a diameter of 1.3 cm. The wall in this region has a complete loss of layering and is focally/asymmetrically thickened with a wall thickness of 0.80 cm. Findings are most consistent with bowel masses.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with nonformed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

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 hyperechoic around the abnormal sections of bowel.

Other

Ringdown artifact is visualized at the level of the diaphragm.

An irregular mixed echogenic mass is visible on the right side of the thorax measuring 2.14 cm x 1.23 cm.

There is a hypoechoic ovoid nodule visualized in the subcutaneous tissue, measuring 0.58 cm x 0.91 cm.

ULTRASONOGRAPHIC FINDINGS

- Ill-defined hypoechoic mid body mass in the spleen –Differentials include lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.
- Dependent sandy debris in the urinary bladder – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus.
- Two suspected focal areas of asymmetrical severe small intestinal wall thickening with complete loss of layering – findings are most consistent with focal bowel masses. Primary differentials would include lymphoma, carcinoma, other.
- 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. Incidental gall bladder debris is less common in cats.

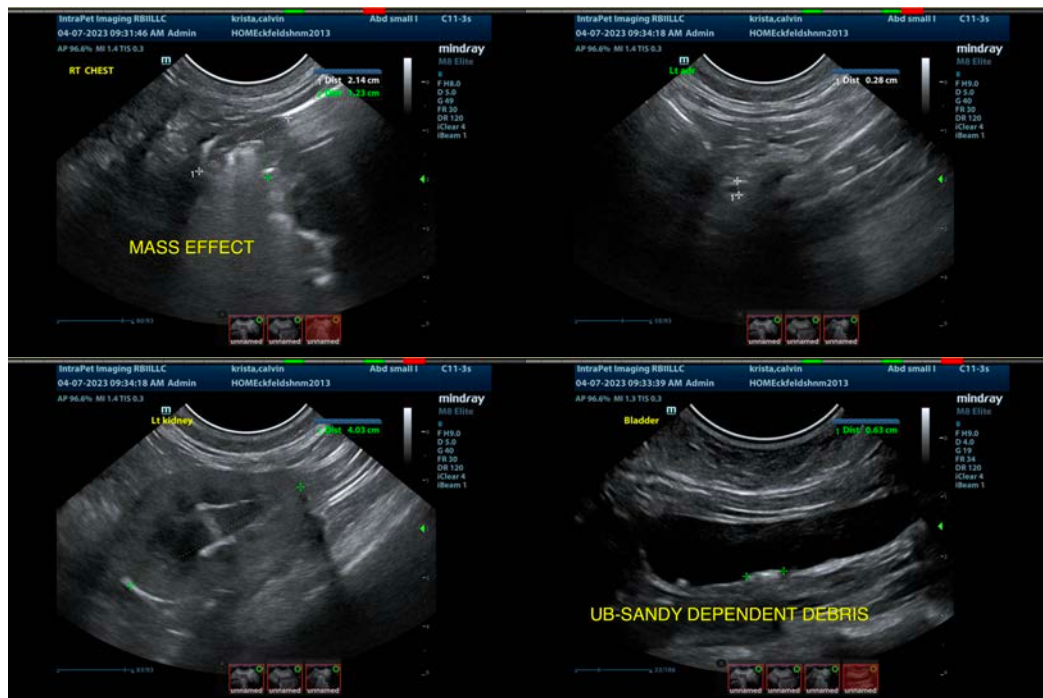
- Irregular mixed echogenic right-sided thoracic mass – Differentials include metastatic neoplasia, a primary lung mass, lung consolidation, other.
- Ringdown artifact visualized at the level of the diaphragm – Findings are concerning for pulmonary parenchymal disease.
- Hypoechoic subcutaneous mass lesion – Recommend fine needle aspirate.

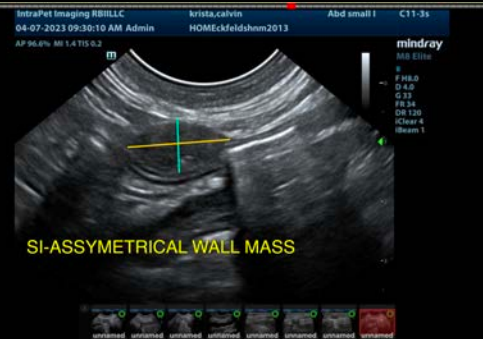
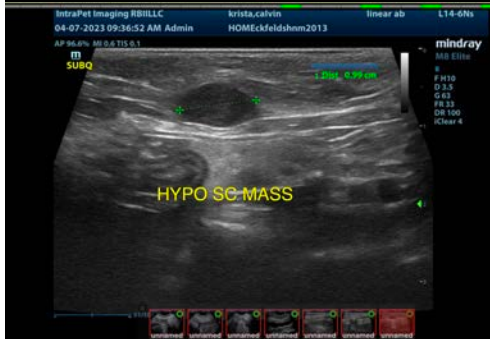
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

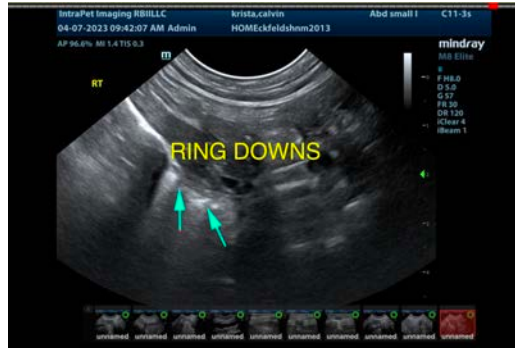
Two focal bowel mass lesions are suspected with complete loss of layering. Of primary concern with these lesions would be round cell neoplasia, although other differentials such as carcinoma, adenoma, etc. are possible. Consider a fine needle aspirate of the bowel wall/mass. Additionally, there is an ill-defined mass effect visualized in the spleen. Recommend a fine needle aspirate.

There is an irregular mass effect visualized in the right side of the thorax. If a window for a fine needle aspirate can be visualized, consider sampling of this lesion.

Findings are concerning for metastatic neoplasia. If a cytologic diagnosis can be obtained, consider consultation with a veterinary oncologist regarding treatment options and prognosis. If not already done, recommend 3-view thoracic radiographs.







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