

**DATE PRESENTING CLINICAL SIGNS**

1/13/22

History: Cat has weight still eating and drinking fine. X-rays indicates loss of abdominal detail. Blood work confirms hepatobiliary disease.

PATIENT

Pocco Barnett

Lab results: Attached separately.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

SPECIES

Feline

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**BREED**

DSH

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.

SEX

Neutered Male

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 perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

AGE

9/25/07

The right kidney has a normal shape and size (4.61 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

WEIGHT

9.4 Pounds

INTERPRETED BY

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

Adrenal Glands

The region of left adrenal (Cranial to left renal artery) is unremarkable but the adrenal is not distinctly visualized. No evidence of a mass effect.

The region of the right adrenal (between right cranial kidney and vena cava) is unremarkable, but the adrenal is not distinctly visualized. No evidence of a mass effect.

IMAGING PERFORMED BY

Andi Parkinson RDMS

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.

HOSPITAL NAME

Glen Burnie AH

Liver

The liver is large in size, and normal 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.

REFERRING VET

Dr. Shah

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 mild amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

INVOICE

34216

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.

Some of the visualized areas of small intestine have a relatively uniform diameter with minimal fluid distension. There is a focal area of small intestine where the wall progressively thickens into a focal bowel mass. In this area, the wall thickness is 1.7 cm with a complete loss of layering. Diameter of this mass effect is 3.4 cm and extends at least 5.0 cm in length. There is a generalized increase in prominence of the muscularis layer, and no significant obstructive pattern visualized.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Just after the ileocecal junction, there is a section of colon with progressive wall thickening and focal mass effect. In this area, the wall of the colon measures 2.0 cm in thickness with complete loss of layering. The lumen is dramatically narrowed. This creates a mass effect measuring 2.75 cm x 3.21 cm.

Pancreas

The area of 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

There is scant anechoic free fluid visualized. There is a severe lymphadenopathy with a cluster of mesenteric lymph nodes at the root of the mesentery, measuring 5.3 cm x 3.16 cm. The omentum is generally of increased echogenicity.

PRIMARY FINDINGS

- Focal small bowel mass – There is a focal loss of layering and thickening of the intestine, most consistent with a mass effect. Common differentials would include lymphoma, carcinoma, leiomyoma, leiomyosarcoma, etc.
- Focal colon wall thickening and mass effect – This appearance favors a likely cancerous lesion. Differentials include round cell neoplasia, carcinoma, leiomyoma, leiomyosarcoma, etc. Other possibilities exist.
- Severe mesenteric lymphadenopathy – The severe mesenteric lymphadenopathy is most concerning for a neoplastic process, although you can see significant lymphadenopathy in some cases of autoimmune/inflammatory disease, infectious disease (tick born disease-such as bartonella, fungal infections, FIP (cats)) etc. A fine needle aspirate with cytology is recommended for further evaluation.
- Large, heterogeneous liver – Hepatic changes are non-specific and could be consistent with inflammation/infection (cholangiohepatitis), infiltrative neoplasia, lipidosis or other hepatopathy. Given the two abdominal masses visualized, neoplasia would have to be high on the differential list.

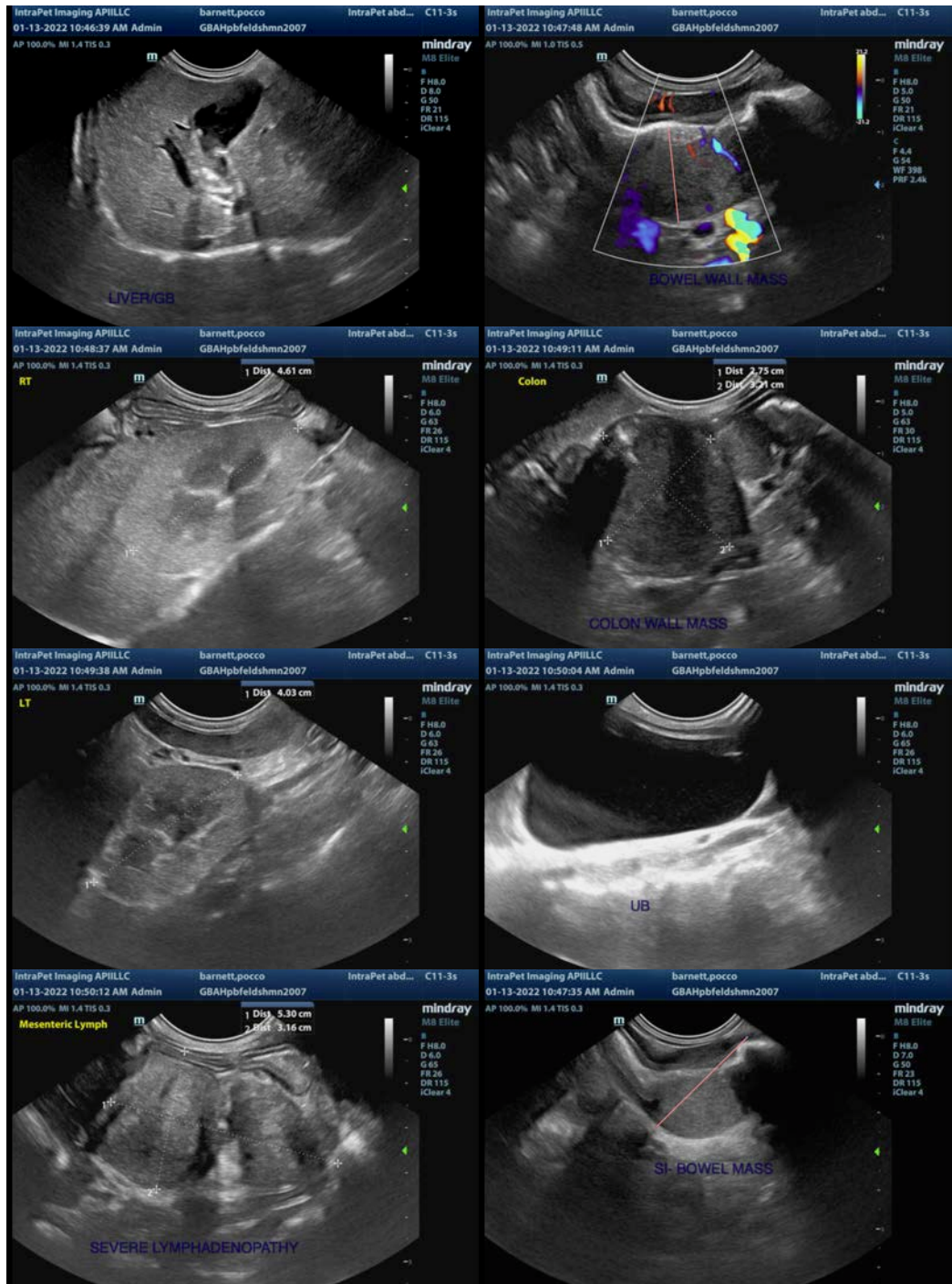
SECONDARY FINDINGS

- Mild 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.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a large focal mass effect affecting the small intestine, and a second mass effect involving the colon. These are highly concerning for a neoplastic process. Considering the severe mesenteric lymph node enlargement, metastatic neoplasia is the primary differential. Recommend a fine needle aspirate of the mesenteric lymph nodes, colon, and small intestinal mass.

Most likely differential for the elevation in liver enzymes and enlarged liver would be a metastatic process, but primary liver disease could be happening concurrently. Consider a fine needle aspirate of the liver. Recommend 3-view thoracic radiographs. If cytologic diagnosis can be obtained, recommend consultation with a veterinary oncologist regarding treatment options and prognosis. There was no overt evidence of obstruction in this study. If cytologic diagnosis cannot be obtained, surgical biopsies would likely be required.





The information and recommendations provided are based on the images presented by the referring veterinarian. 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