

IMAGING PERFORMED BY

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DATE PRESENTING CLINICAL SIGNS

2/15/23

PATIENT

Lucky Faulkner

1/26 vomiting, chronic constipation, weight loss and smelly urine. Senior labs showed p had a UTI and high Normal T4 suspected Hyperthyroid normalized by other conditions. Tx w/convenia, started methimazole. 2/03 gave enema to clear obstipation. p returned 1 week later for constipation/obstipation again. P had been well maintained w/royal canin Fiber Response but had switched to kitten food to try to bulk up when weight loss noted (rec from other vet) AO to switch back to fiber response. o reports p appetite has been off and p is continuing to vomit @ least 1x daily

SPECIES

Feline

Current Medications: Chronic meds Cisapride 5mg TID upped to 7.5mg, Miralax and lactulose, cerenia added, injection of dex SP given 2/8
Lab Results: T4- 4.7

BREED

DSH

Radiographs: intermittent distension of large intestine/ileus. most recent xray shows subjectively thickened SI/bowel walls

Date of Previous IntraPet Ultrasound: No previous.

SEX

Neutered Male

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Stephanie Warga RDCS, RVT.

AGE

2/26/09

WEIGHT

8 Pounds

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with a very small amount of echogenic 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, cellular debris and proteinaceous debris.

INTERPRETED BY

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

The left kidney has a normal shape and size (3.85 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.

HOSPITAL NAME

Northwind AH

The right kidney has a normal shape and size (3.47 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.

REFERRING VET

Dr. Repsher

Adrenal Glands

The left adrenal gland is normal in size measuring 0.31 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.

INVOICE

45150

The right adrenal gland is normal in size measuring 0.29 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 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.

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 gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and primarily anechoic. The bile duct appears somewhat prominent and tortuous but is not overtly dilated, measuring at 0.27 cm.

Gastrointestinal

The stomach contains a large amount of shadowing ingesta and fluid. 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.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with mild to moderate 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 0.17 cm. Visualized peristalsis appears appropriate. There is a discrete hypoechoic structure visualized associated with the small bowel. In many images this appears intraluminal, but I cannot rule out the possibility of an extraluminal lesion impinging on the lumen of the bowel. This measures approximately 1.16 cm x 0.88 cm and appears relatively avascular on power doppler. This is most consistent with a cystic lesion (possibly an epidermoid cyst?), but a very anechoic solid structure cannot be ruled out. There is no evidence of a severe obstruction, but a partial obstruction is suspected.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with a large amount of formed 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. There is a significant lymphadenopathy present with a very large hypoechoic irregular lymph node visualized at the mesenteric root, measuring 1.49 cm x 3.43 cm.

PRIMARY FINDINGS

- Small amount of echogenic debris visualized in the urinary bladder – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus.
- Moderate to large amount of shadowing material, ingesta visualized within the gastric lumen – Correlate with the feeding history and abdominal radiographs. If the patient was adequately fasted consider such differentials as delayed gastric emptying, a partial outflow tract obstruction (none seen) or ingested foreign material.
- Hypoechoic, somewhat avascular structure visualized associated with the small bowel – This could represent a benign lesion such as an epidermoid cyst or a very hypoechoic mass lesion. This lesion does appear to impinge on the lumen somewhat, possibly causing a partially obstructive process.
- Severely enlarged lymph node at the mesenteric root – The moderate mesenteric lymphadenopathy could be 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.

SECONDARY FINDINGS

- Slightly prominent tortuous bile duct - With no concurrent liver enzyme elevations, this can be normal in some geriatric cats.

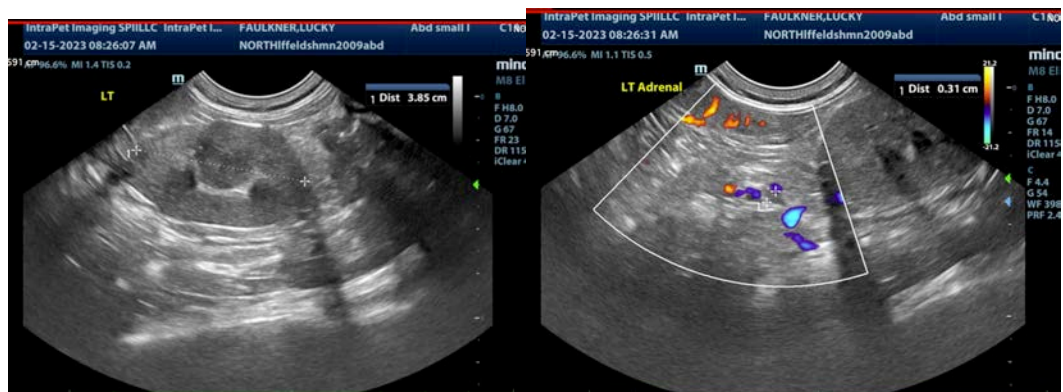
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

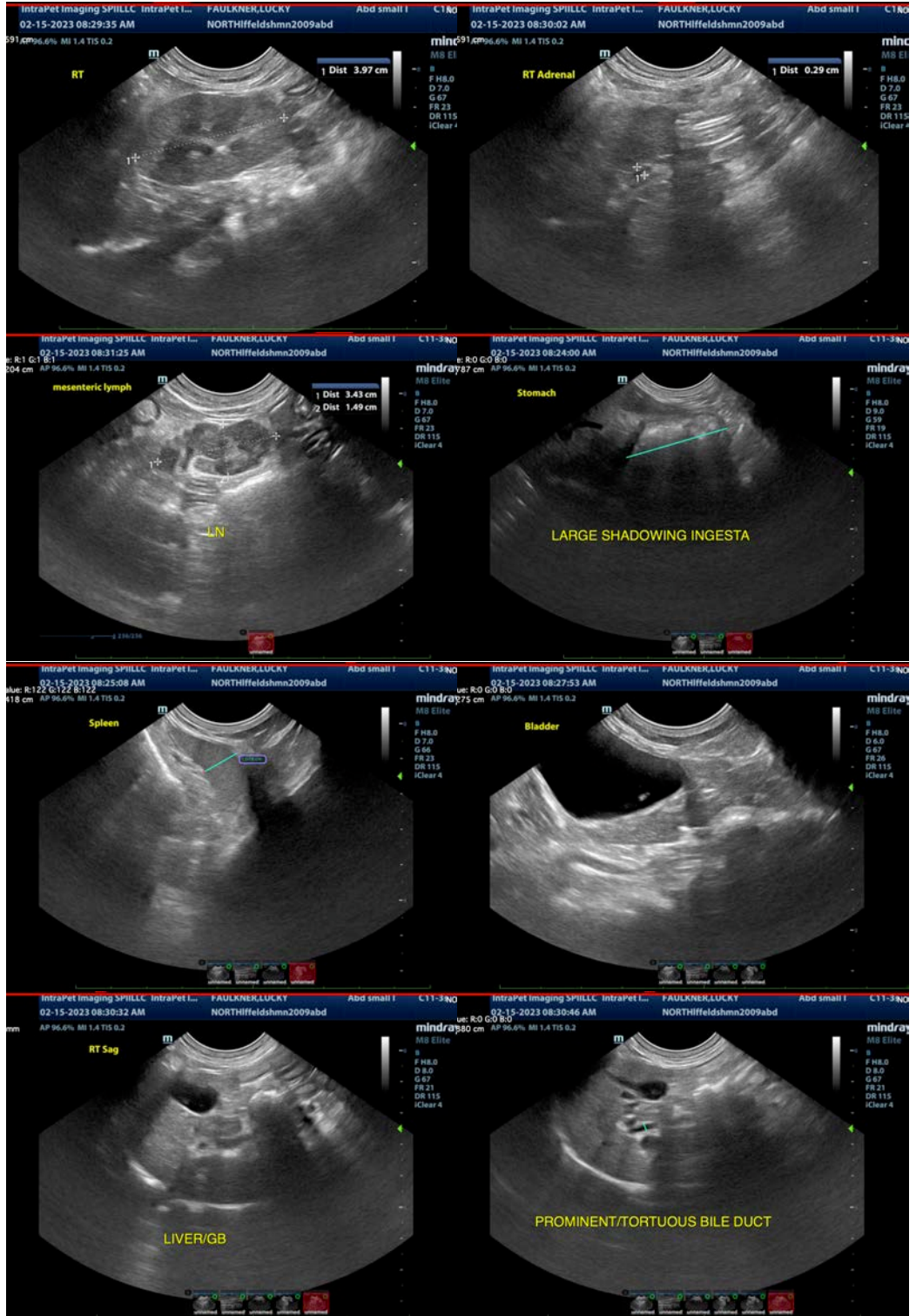
The stomach appears dilated with some shadowing material/ingesta. Correlate these findings with abdominal radiographs and feeding history. If the patient was adequately fasted, then consider the possibility of delayed gastric emptying or partial outflow tract obstruction/ingestion of foreign material.

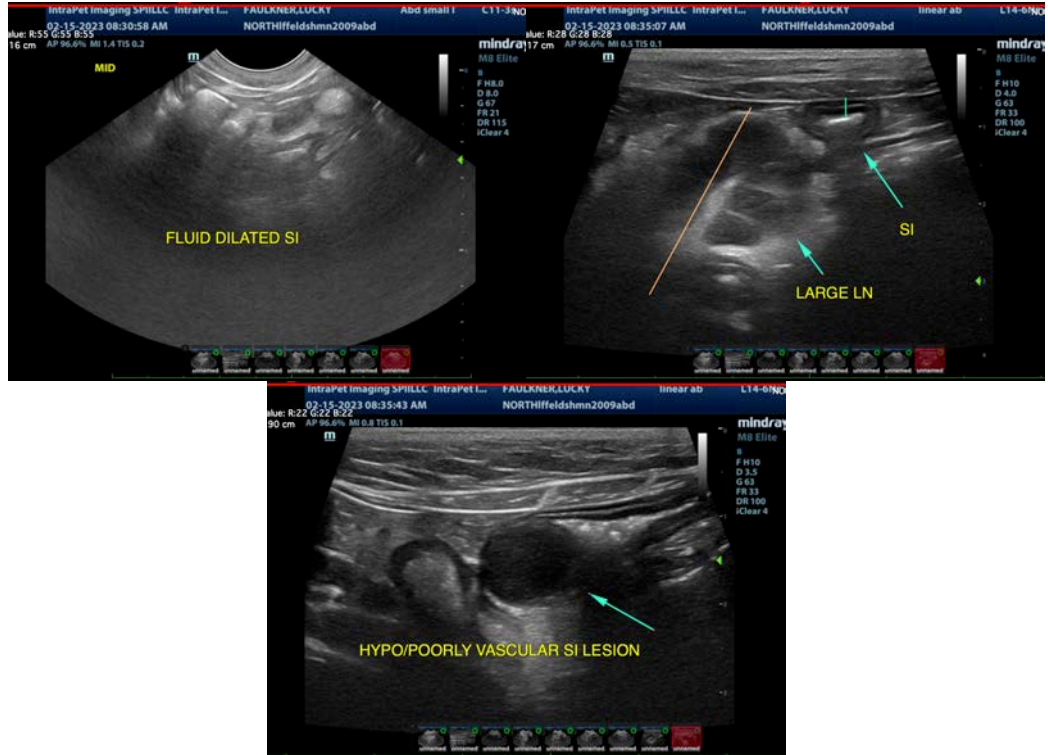
The small bowel appears somewhat fluid dilated, but not with an overtly obstructive appearance. Additionally, there is a hypoechoic to anechoic structure visualized associated with the small bowel. I suspect this is intraluminal but an extraluminal lesion impinging on the lumen could also be a possibility. While a complete obstruction is not visualized here, a partial obstruction is suspected. This could represent a benign cystic structure or could be associated with underlying neoplasia. Consider surgical evaluation of this lesion with histopathology.

Additionally, there is a very large mid abdominal lymph node. Recommend a fine needle aspirate of this lymph node prior to considering surgery, as there is a concern that this could represent an underlying neoplastic process. Alternately, you could consider surgical evaluation, where the small bowel, lymph node, and small bowel lesions are sampled or removed, provided 3-view thoracic radiographs appear normal.

The correlation between these findings and the constipation reported is unclear. This could be due to the dietary change, etc. Consider the addition of probiotics, as this has been shown to be helpful in cases of constipation. Additionally, you could consider a more conservative approach, where the lymph node is sampled, and medical management is reinstated for the colon in the hopes that it will be stabilized before moving on to more invasive evaluation. If surgery is delayed, continued monitoring is warranted, as I do not suspect a complete obstruction, but this is possible.







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.

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