

**DATE PRESENTING CLINICAL SIGNS**

8/27/21 History: chronic diarrhea for 12 weeks. Mild weight loss at 1/2 Lbs.
Current Medications: Metronidazole 40mg BID for 7 days-no effect. Venison diet-no improvement.

PATIENT Lab Results: Attached separately.

Augie Wood Radiographs: Not provided by the veterinarian.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Not needed.

Stat Report: Not requested.

SPECIES

Feline

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**BREED** *Urinary System*

DSH

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 (3.6 cm). Overall echogenicity is slightly hyperechoic with poor 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

6/12/09

The right kidney has a normal shape and size (3.73 cm). Overall echogenicity is slightly hyperechoic with poor 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

8.08 Pounds

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.

INTERPRETED BY

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Medicine)

HOSPITAL NAME

Northwind AH

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. The spleen measured 0.83 cm in width at the hilus.

REFERRING VET

Dr. Miller

Liver

The liver is subjectively normal in size with smooth peripheral margins. The parenchyma is hyperechoic and homogenous in echotexture. The visible portions of the vasculature and biliary tract appear normal. There is an ill-defined, hypoechoic nodule visualized, measuring 0.6 cm.

INVOICE

25025

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. 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.

The visualized 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 0.24 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with 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 revealed a small amount of anechoic free fluid. Mild lymphadenomegaly is present. Mesenteric lymph nodes are prominent and measure approximately 0.3-0.45 cm. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of generally of normal echogenicity.

Other

A brief view of the heart was submitted. No pericardial effusion was seen.

PRIMARY FINDINGS

- Large, hyperechoic liver with hypoechoic nodule – Hepatic changes are non-specific and could be consistent with hepatic lipidosis, inflammatory/infectious disease, infiltrative neoplasia, or other hepatopathy.
- Prominent muscularis layer to the small intestine – The small intestinal wall changes are most consistent with an inflammatory process (i.e., inflammatory bowel disease) with a low possibility of emerging lymphoma.
- Small volume anechoic free fluid in the abdomen
- Mild mesenteric lymphadenopathy – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

SECONDARY FINDINGS

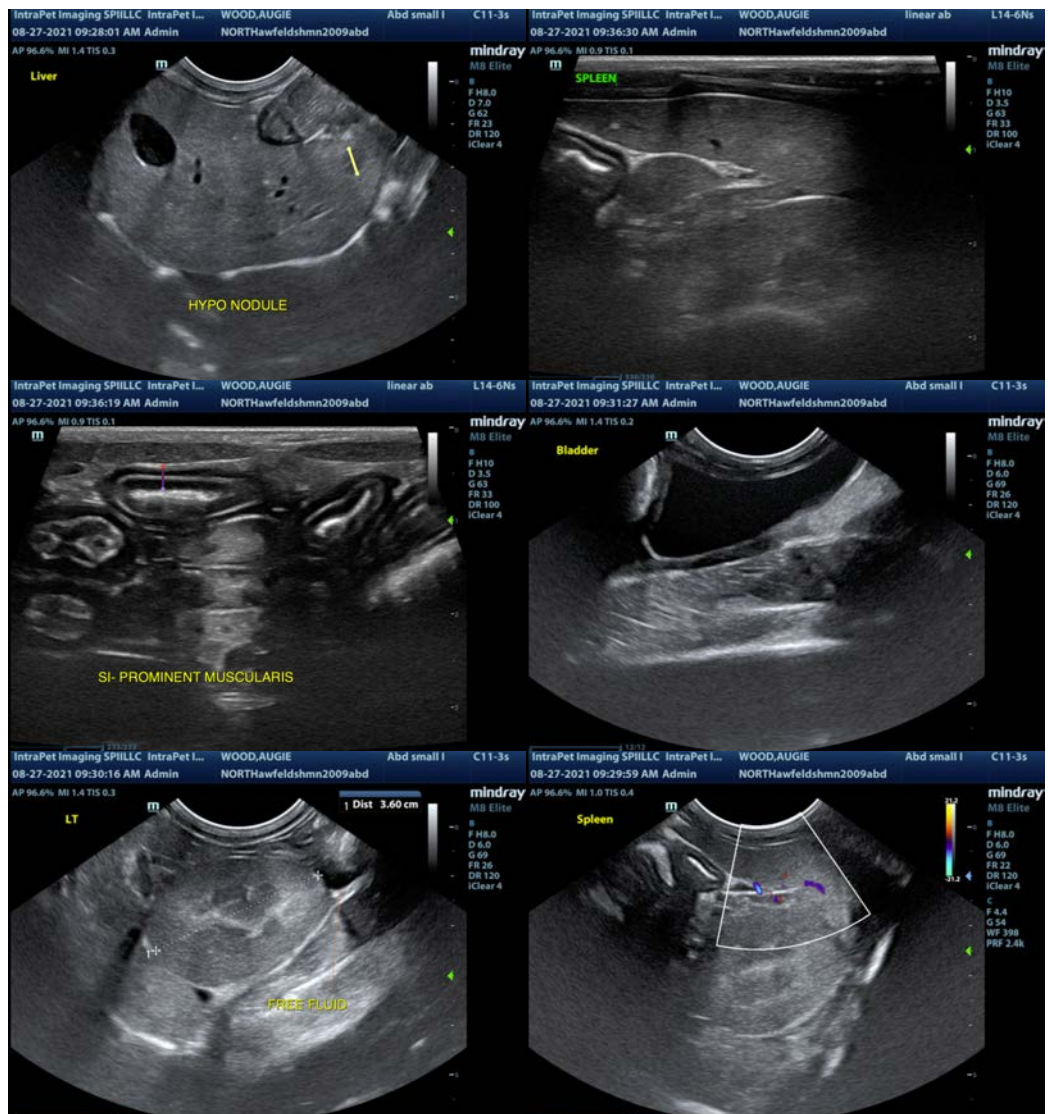
- Decreased corticomedullary distinction both kidneys – The bilateral renal findings are consistent with age-related change.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The primary abnormalities observed were a bright liver and a prominent muscularis layer to the small intestine in addition to some free fluid. Correlate these findings with blood work results. Consider fine needle aspirate of the liver and liver function test if values are elevated, and recommend a GI panel with a quantitative fPLI, B12 and folate to further assess for underlying intestinal disease. Unfortunately, ultrasound can be insensitive in definitively diagnosing a cause for diarrhea. No focal lesions were observed. Consider primary causes such as GI parasitism, mild pancreatitis, bacterial dysbiosis, food allergy, IBD, and less likely intestinal neoplasia.

In older patients with more chronic symptoms, I would most strongly consider food allergy, IBD, and intestinal neoplasia.

- Recommend diet trial with a novel protein/hydrolyzed prescription diet
- Recommend GI panel for evaluation of B12 levels etc. (start empirical B12 while waiting for results)
- If symptoms are progressing consider obtaining GI biopsies





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.

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