

**DATE PRESENTING CLINICAL SIGNS**

7/18/23 Ongoing weight loss since 02/23, intermittent hyporexia and diarrhea. PE: BCS 3/9, thick ropey intestines abdominal palpation, grade 3/6 CM.

**PATIENT**

Jasmine Lawless

Current Medications: None.

Lab Results: 02/16/23: CBC- MCV decreased 37 fL, Retic Hgb decreased 14.3 pg. Chem: SDMA high normal 13 ug/dL, Creat mid normal 1.5 mg/dL, BUN increased at 45 mg/dL, fPL wnl. UA cysto- usg 1.018 pH 6.0, epi 1+. T4 3.7 (very slow gradual increase; last time in Sept 2022 was 3.5, and 2.2 the year before that. fT4 was high normal in Sept 2022).

**SPECIES**

Feline

Date of Previous IntraPet Ultrasound: 10/19/2020. See attached.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**BREED**

DSH

Imaging Performed By: Andi Parkinson, BS, RDMS.

**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**

5/1/07

The left kidney has a normal shape and size (3.02 cm) with significant pyelectasia at 0.51 cm. Overall echogenicity is slightly hyperechoic with poor 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 nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

**WEIGHT**

6 Pounds

The right kidney has a normal shape and size (3.01 cm) with moderate pyelectasia at 0.47 cm. Overall echogenicity is slightly hyperechoic with poor 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 hydronephrosis. Renal vasculature is normal.

**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 is visualized.

**HOSPITAL NAME**

Perry Hall AH

The right adrenal gland is normal in size measuring 0.49 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. Baer

**Spleen**

The spleen is borderline "plump" and hypoechoic, measuring 0.79 cm in width at the level of the hilus. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

**INVOICE**

44081

**Liver**

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is mildly heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There is an ill-defined hypoechoic nodule visualized in the left side measuring 0.49 cm in diameter.

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 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 0.25 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 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***

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There are occasional prominent/mildly enlarged mesenteric lymph nodes, examples of which measure 0.45, 0.42, and 0.35 cm. The omentum is generally of normal echogenicity.

## **ULTRASONOGRAPHIC FINDINGS**

- Decreased corticomedullary distinction in both kidneys with bilateral pyelectasia – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. The pyelectasia appears stable from the previous scan in 2020.
- Hypoechoic spleen – The significance of this is unclear but could be consistent with infiltrative disease. Consider a fine needle aspirate.
- Heterogeneous liver with ill-defined hypoechoic nodule – 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. The appearance of the subtle hypoechoic nodule visualized is of uncertain significant.
- Prominent muscularis layer to the small intestine – The small intestinal wall changes could be consistent with an underlying inflammatory process. These types of changes can sometimes be seen in normal older cats. Correlate with clinical signs.
- Prominent mesenteric lymph nodes – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

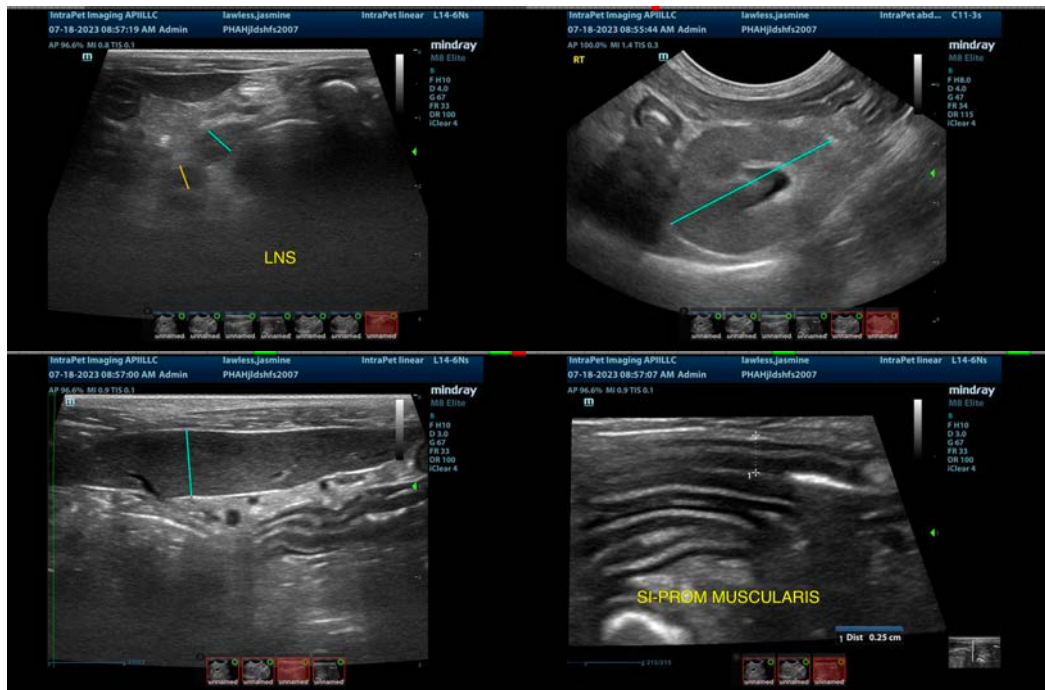
## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

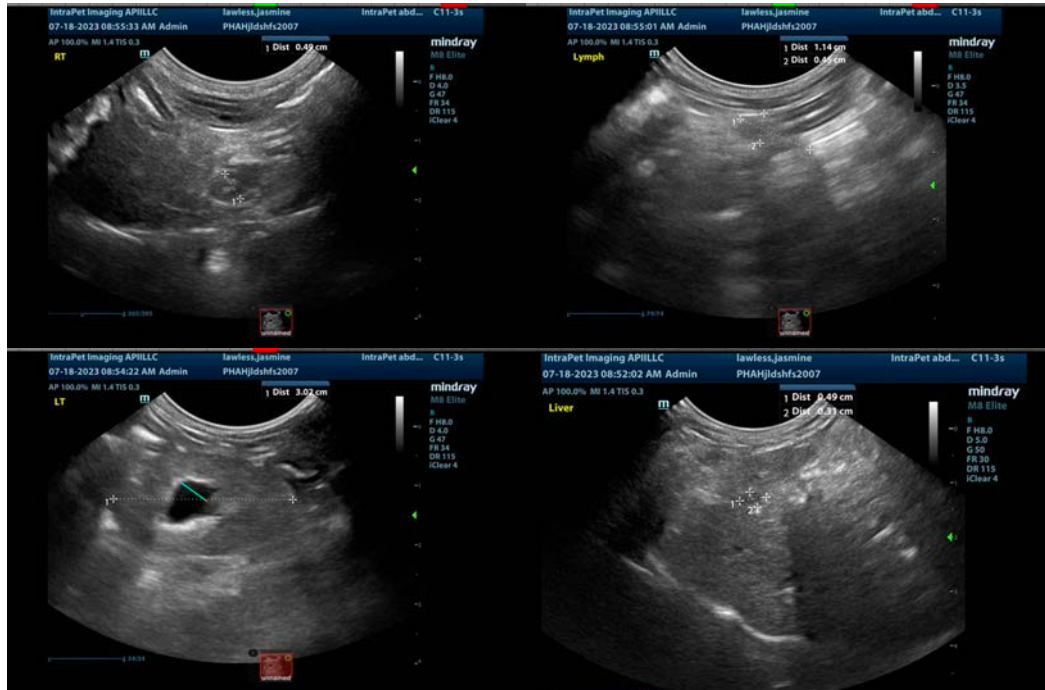
Today's scan appears relatively similar to the previous scan in 2020, although some of the changes appear to have progressed somewhat. The renal pyelectasia is stable, but subjectively the small bowel appears slightly more thickened, and the mesenteric lymph nodes are slightly more prominent. These findings are concerning for a primary gastrointestinal issue (inflammation, neoplasia, other). It is likely that sampling would be necessary to obtain a diagnosis. You could consider a fine needle aspirate of the spleen, as it does appear somewhat hypochoic.

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

- Consider a novel protein/hydrolyzed protein diet (exclusively at least 4-6 weeks)
- Consider a GI panel to Texas A&M for evaluation of B12 levels, folate, PLI/TLI etc.. to further evaluate for pancreatic/small intestinal disease.
- Recommend chronic probiotic therapy.
- If symptoms are persistent (per the history they are persistent and progressive), consider obtaining GI biopsies.

The significance of the heterogeneous liver is uncertain with no reported liver enzyme elevations, although a fine needle aspirate could be considered.





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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