

**DATE PRESENTING CLINICAL SIGNS**

8/24/22 Lethargy, hiding, abdominal pain, abdominal mass caudal abdomen.

PATIENT Current Medications: None listed.

Tiggs Miller

Radiographs: large caudal abdominal mass with poor detail.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Requested by DVM.

SPECIES

Feline

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

DSH

SEX

Spayed Female

AGE

8/6/06

WEIGHT

9.5 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Stephanie Warga
RDMS, RVT

HOSPITAL NAME

Warm & Fuzzy Vet

REFERRING VET

Dr. Urie

INVOICE

40683

Urinary System

The urinary bladder is moderately distended with mild primarily suspended 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.

The left kidney has a normal shape and size (2.85 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.

The right kidney has a normal shape and size. 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.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.41 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 0.40 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. There is a discrete hyperechoic nodule visualized deep on the right side of the liver, measuring 2.06 cm x 1.75 cm. Additionally, there is a hypoechoic nodule on the left side of the liver measuring 1.11 cm x 0.54 cm.

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.

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 measured 0.26 cm. Visualized peristalsis appears appropriate. There is a large mass effect in the left caudal abdomen measuring 4.075 cm x 4.93 cm. This is a vascular mass, which is surrounded by hyperechoic mesentery and a scant amount of free fluid. This mass effect appears associated with the small bowel and could either be arising from it or adhered to it.

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 prominent and hypoechoic as compared to the surrounding isoechoic mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

There is a scant amount of free abdominal fluid. There are occasional prominent mesenteric lymph nodes. One such lymph node measures 0.48 cm. Additionally, there is an irregular, hypoechoic structure in the cranial abdomen ventral to the stomach, measuring approximately 1.08 cm x 1.0 cm, which could be consistent with a cystic lymph nodes(?). The omentum is hyperechoic around the caudal abdominal mass.

PRIMARY FINDINGS

- Large caudal abdominal mass – This lesion appears associated with the GI tract, but its origin is uncertain. Recommend a fine needle aspirate.
- Hyper- and hypoechoic nodules visualized in the hepatic parenchyma – The significance of these nodules is unclear. The deep hyperechoic nodule would be difficult to sample. Consider a fine needle aspirate of a hypoechoic, more superficial lesion.
- 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

- Echogenic urine in the urinary bladder – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus.
- Decreased corticomedullary distinction in both kidneys – The bilateral renal findings are consistent with age-related change.
- Hypoechoic, prominent pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- Mild debris in the gallbladder – The significance of the aggregated gallbladder sludge is unclear. This

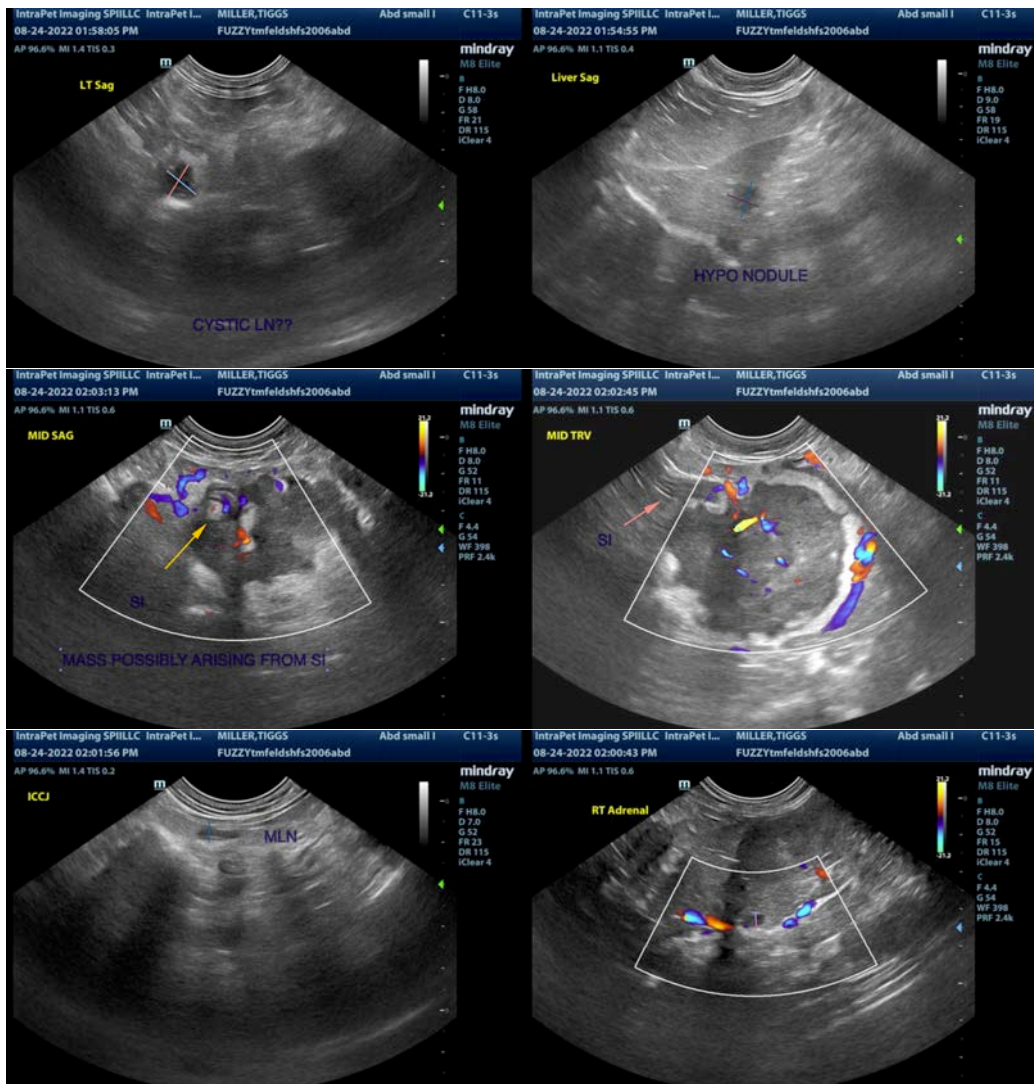
could represent an early mucocele, cholestasis, or may be secondary to fasting.

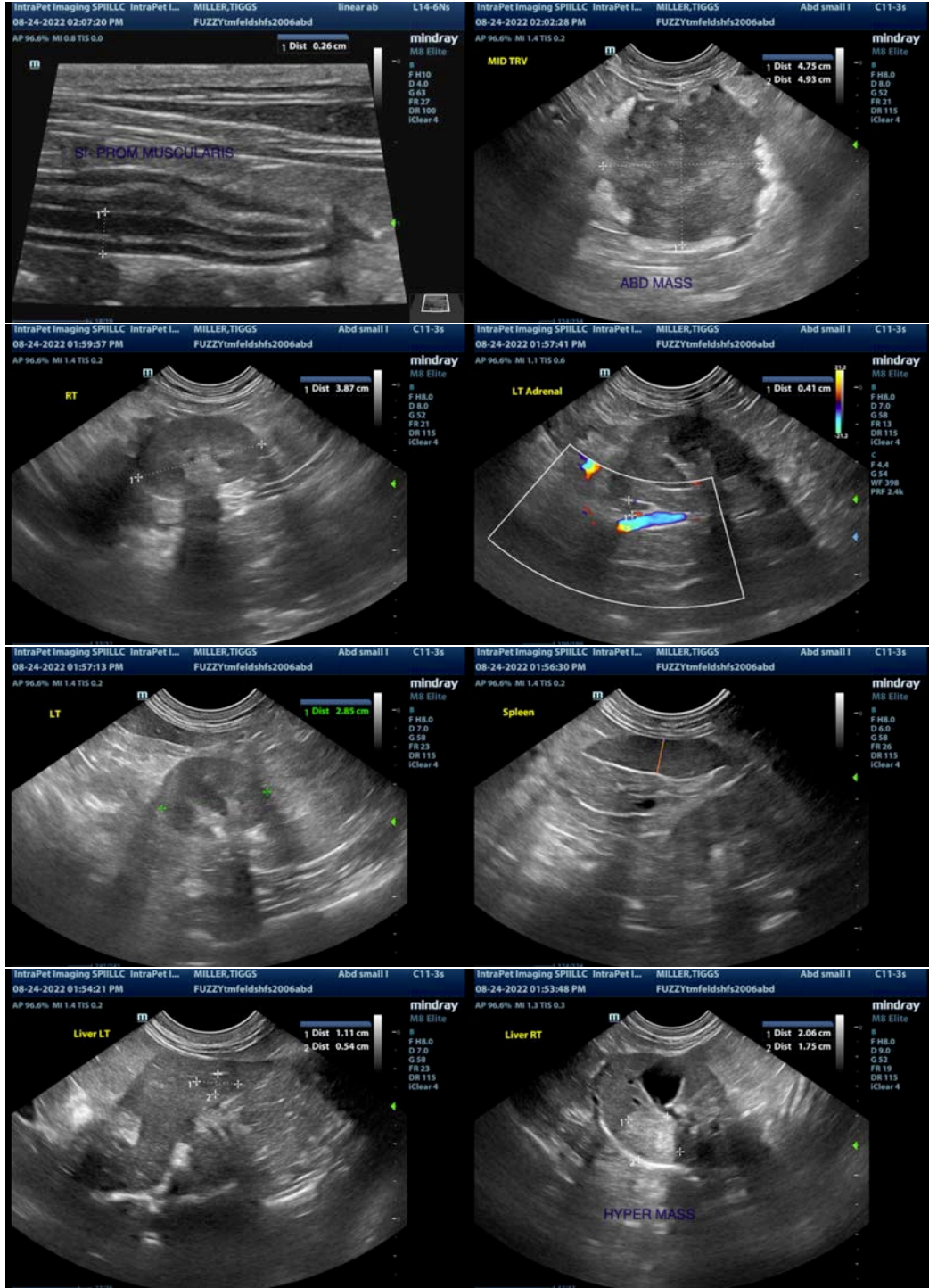
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a large mass effect visualized in the left caudal to mid abdomen. It appears associated with the small bowel, but it is uncertain if this is arising from the bowel, or adhered to it, as no abnormal bowel is visualized. This lesion could represent a benign or cancerous mass, an abscess, granuloma, etc. Recommend a fine needle aspirate of the mass lesion and a liver nodule.

There are prominent mesenteric lymph nodes visible. These could be consistent with reactive lymph nodes or with metastatic disease.

Options moving forward would include referral to a surgeon for exploratory and evaluation of the mass effect to determine if it can be surgically resected along with a biopsy. Alternately, you could consider a contrast CT scan to further evaluate the mass lesion and to look for evidence of metastasis. It may be difficult to discern bowel involvement from adhesion even based on CT scan.





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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