

**DATE PRESENTING CLINICAL SIGNS**

6/21/22 P acutely lethargic. Blood work was unremarkable, but hepatomegaly and splenomegaly both noted on abdominal radiograph.

PATIENT

Ziggy Trombetta

Current Medications: Signs of urinary tract infection. Started on 187.5mg bid Clavamox.

Lab Results: See attached.

Radiographs: See attached.

SPECIES

Canine

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

BREED

Shetland

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**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

Sheepdog

The prostate is normal in size (1.03 cm) and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

AGE

1/27/08

The left kidney has a normal shape and size (4.37 cm) with mild pyelectasia at 0.22 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 nephroliths, infarcts or hydroureter. Renal vasculature is normal.

WEIGHT

28.5 Pounds

The right kidney has a normal shape and size (4.63 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.

INTERPRETED BY

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

Adrenal Glands

The left adrenal gland is normal/borderline large in size measuring 0.72 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.

IMAGING PERFORMED BY

Stephanie Pearce
RDMS, RVT

The right adrenal gland is normal/borderline large in size measuring 0.82 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.

HOSPITAL NAME

Fullerton AH

Spleen

The spleen is subjectively normal in size and the echotexture is homogenous. The splenic capsule is smooth with no visible irregularities. Rare discrete focal hyperechoic, perivascular parenchymal abnormalities are present. The appearance of these lesions is most consistent with benign splenic myelolipomas. The blood flow through the hilus and splenic parenchyma appears normal.

REFERRING VET

Dr. Levine

INVOICE

38959

Liver

The liver is large in size, and normal in 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.

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 moderate 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 what appears to be slightly increased thickness at 0.84 cm. There is some variability due to the presence of rugal folds. There is no impression of reduced peristaltic activity. No masses or focal lesions are observed.

The visualized areas of duodenum, jejunum and ileum have a uniform diameter with minimal fluid distension. Wall appears subjectively, mildly increased. Bowel loops follow a typical curvilinear path with distinct wall layering. Jejunum wall measured 0.30 cm. Mucosal speckling is observed in some sections of small intestine. 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 did not reveal any evidence of effusion. There is what appears to be a cystic sublumbar lymph node measuring 2.98 cm x 1.3 cm. The omentum is of normal echogenicity.

PRIMARY FINDINGS

- Large heterogeneous liver – 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.
- Moderate gallbladder debris – The significance of the aggregated gallbladder sludge is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.
- Subjectively thickened gastric wall – The stomach wall thickening could be consistent with inflammation, edema, infiltrative neoplasia, imaging artifact due to rugal folds, other.

SECONDARY FINDINGS

- Decreased corticomedullary distinction in both kidneys – The bilateral renal findings are consistent with age-related change.
- Hyperechoic foci in the spleen – most consistent with benign myelolipomas.
- Cystic sublumbar lymph node – significance is unclear. Recommend continued monitoring.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

An obvious cause for the lethargy reported is not readily visualized. Recommend culture of the urine to look for evidence of a urinary tract infection and possible treatment.

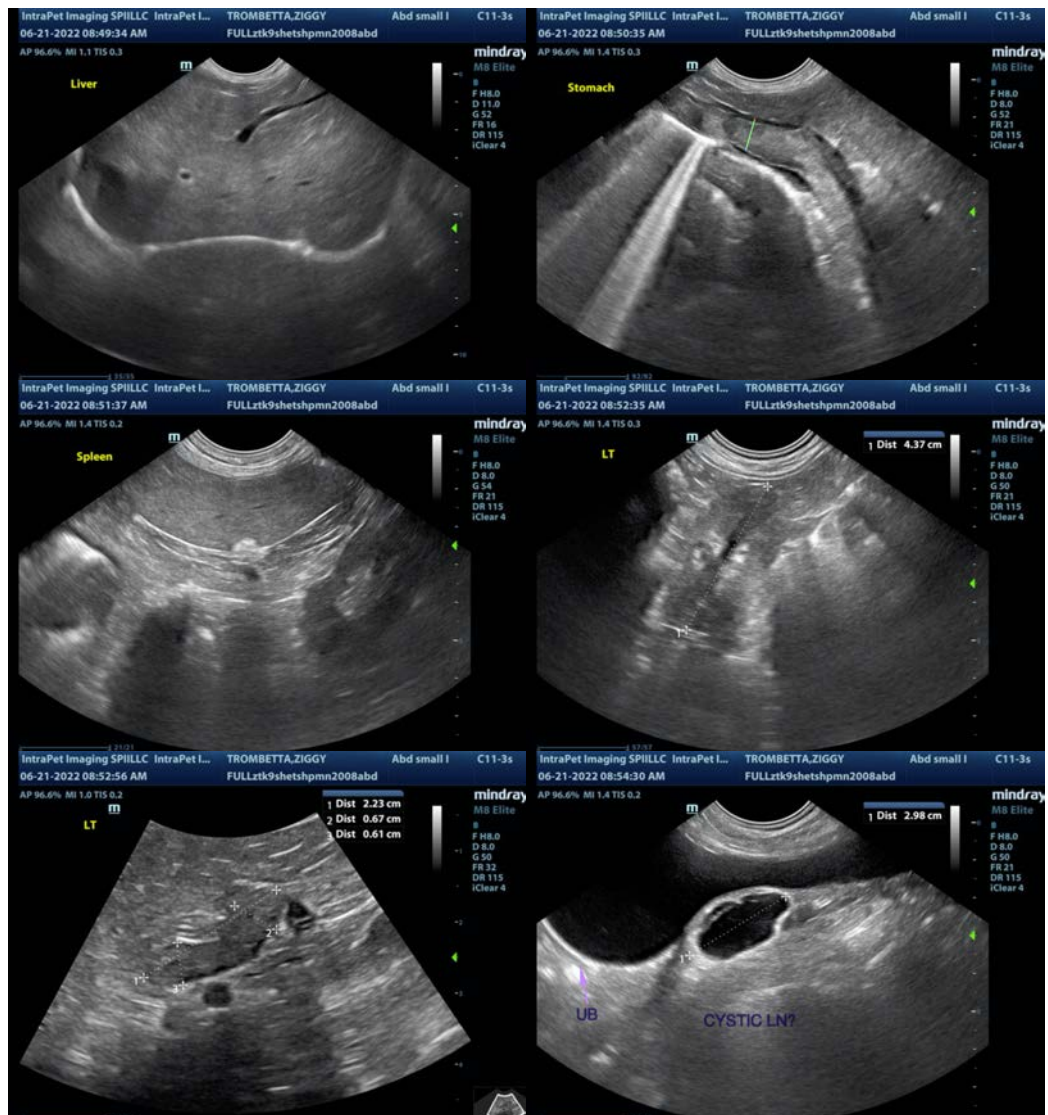
The liver is large and somewhat heterogeneous. The significance of this in the absence of liver enzyme elevations is uncertain. You could consider a liver function test and a fine needle aspirate, but no focal lesions are observed.

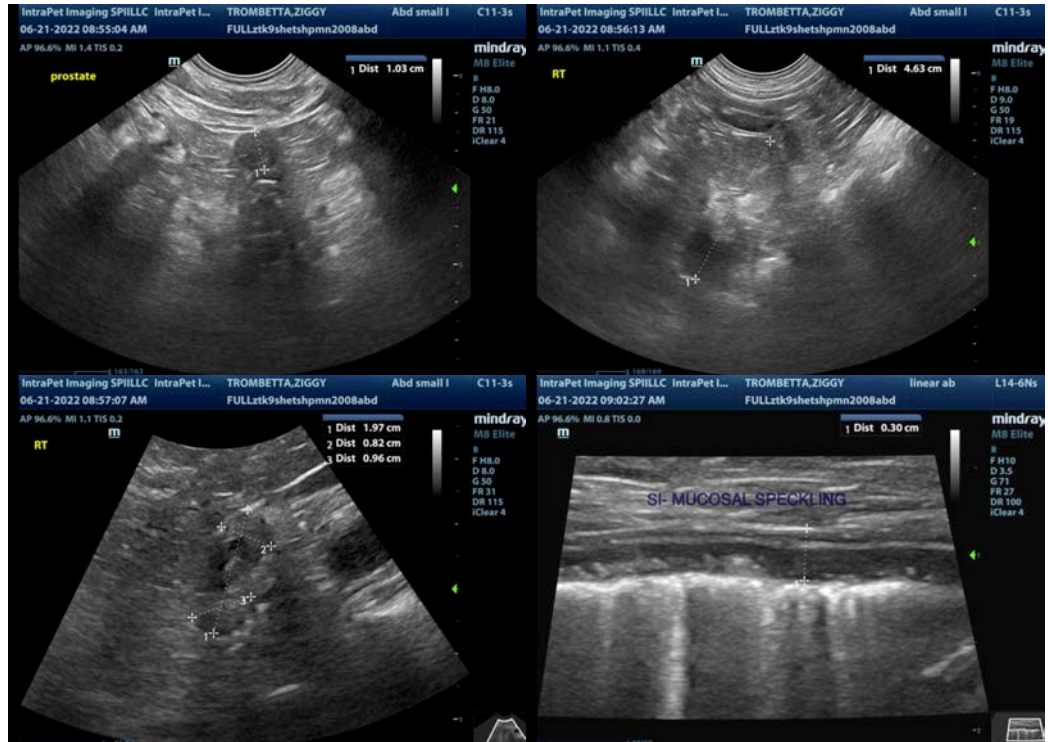
Additionally, the gastric wall appears subjectively thickened. This could be artifactual due to lack of distention, rugal folding, etc., but if symptoms persist, biopsies of this area could be considered.

Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.

In some sections of small intestine, there is mild mucosal speckling. This can be seen with intestinal inflammation. If there is concern for underlying gastrointestinal disease, you could consider a GI panel to Texas A&M for a qualitative PLI, TLI, cobalamin and folate to further evaluate this issue.

Both adrenal glands appear somewhat "plump". Given there are no signs of Cushing's disease present, I would not necessarily pursue this further, but if they were to develop you could consider adrenal function testing.





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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