

**DATE**

1/13/23

PRESENTING CLINICAL SIGNS

Weight loss, TT4 high, T4 high normal.

Current Medications: Methimazole 2.5mg BID.

Lab Results: See attached. Specialist who reviewed lab results believes there is something other than hyperthyroidism going on.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brilhart, RDMS.

PATIENT

Toby Peniston

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Neutered male

AGE

8/31/06

WEIGHT

10.2 lbs

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.

The left kidney has a normal shape and size (3.58 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. There is mild renal pelvic dilation present measuring 0.43 cm. Renal vasculature is normal.

The right kidney has a normal shape and size (3.5 cm). Overall echogenicity is slightly hyperechoic with mildly reduced 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. There is mild renal pelvic dilation present measuring 0.54 cm. Renal vasculature is normal.

INTERPRETED BY

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

Adrenal Glands

The left adrenal gland is normal in size measuring 0.39 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 0.5 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

Edgewood VH

Spleen

The spleen is normal in size and irregular in shape with homogenous echotexture. The blood flow through the hilus and splenic parenchyma appears normal. There is a hyperechoic nodule at the head of the spleen which deforms the splenic capsule measuring 0.79 x 0.6 cm. The spleen measured 0.56 cm in width at the level of the hilus.

REFERRING VET

Dr. Moffa

INVOICE

42103

Liver

The liver is subjectively normal in size, and 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 gallbladder lumen is moderately distended. The wall of the gallbladder 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 relatively uniform diameter with minimal 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. The jejunum measured as normal (0.26 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 large and hypoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is evidence of regional mesenteric inflammation. Consistent with mild pancreatitis.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegally. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

ULTRASONOGRAPHIC FINDINGS

PRIMARY FINDINGS:

- Decreased corticomedullary distinction in both kidneys with bilateral pyelectasia. The bilateral renal findings are consistent with age-related change. Pyelectasia of both kidneys could be consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other.
- Hyperechoic nodule at the head of the spleen. There is a non-cavitated, hyperechoic splenic nodule visualized. Differentials include lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis. The hyperechoic nature of this nodule trends towards a more benign lesion.
- Hypoechoic, irregular and prominent pancreas with mild surrounding inflammation. The pancreatic changes are most consistent with mild pancreatitis/pancreatic infiltration. I recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider FNA if not improving.
- Heterogenous liver. Hepatic changes are non-specific and could be consistent with inflammation/infection (cholangiohepatitis), infiltrative neoplasia, lipidosis or other hepatopathy.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No focal mass effects or lesions are observed on today's scan to explain the weight loss reported. There are renal changes described with bilateral pyelectasia. I recommend blood pressure evaluation, urinalysis and culture.

There is a hyperechoic nodule at the head of the spleen. The nature of this nodule is unclear, but trends

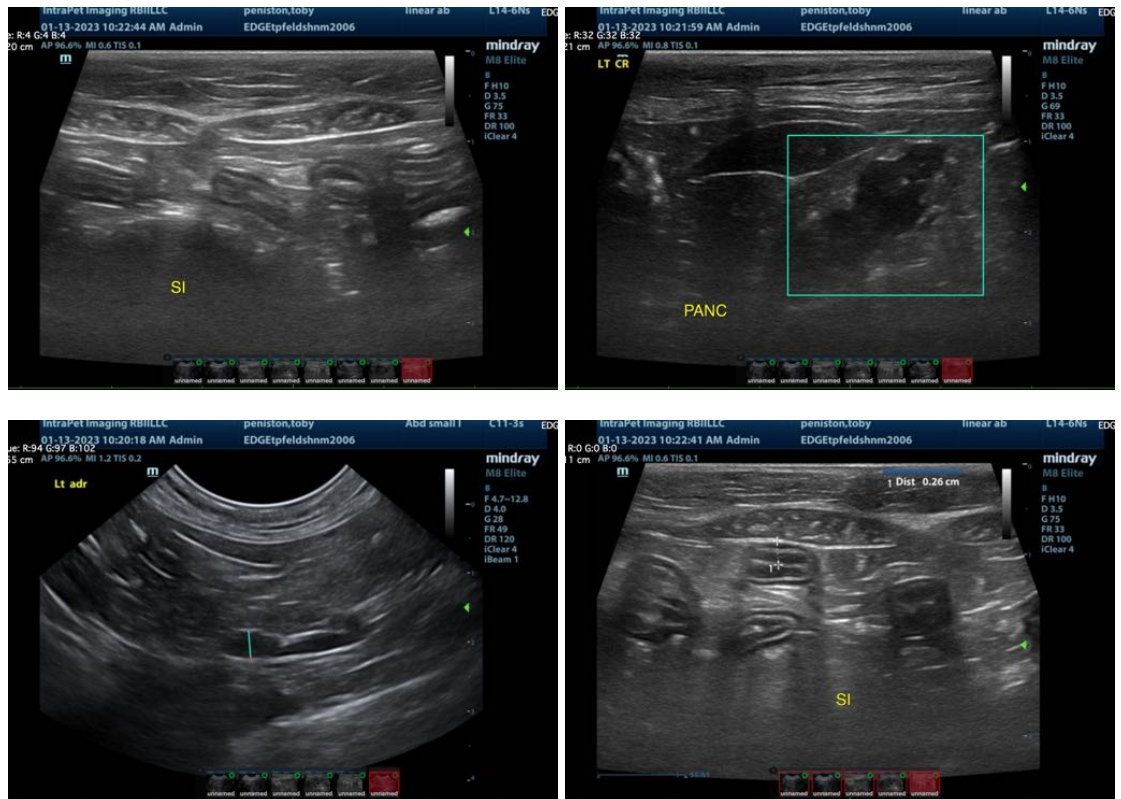
towards a benign etiology. I recommend a FNA of the splenic nodule.

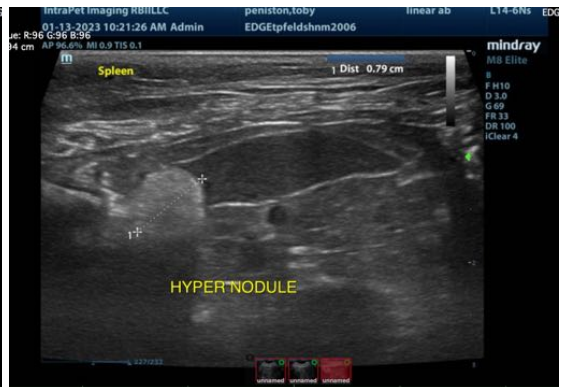
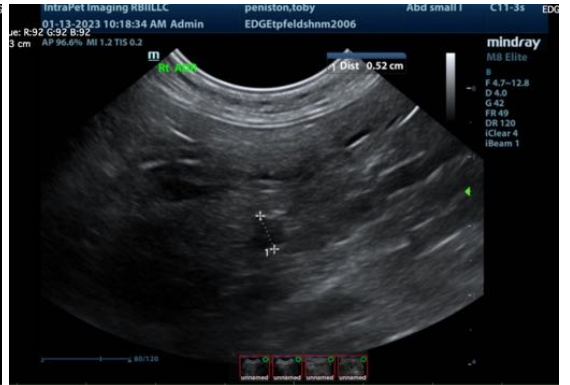
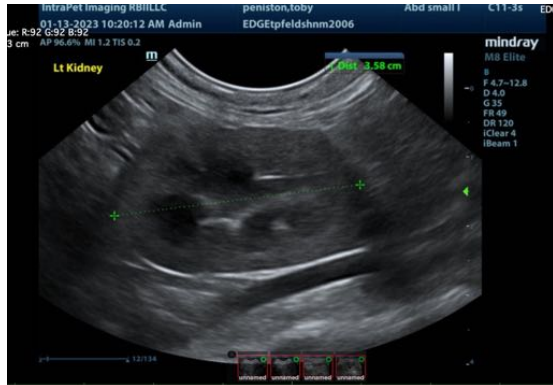
The pancreas is hypoechoic and very irregular with a dilated pancreatic duct. There is no evidence of severe surrounding inflammation, but the pancreas itself appears very abnormal. This may be consistent with mild chronic pancreatitis and previous episodes of pancreatitis or may even be consistent with infiltrative disease to the pancreas. If the symptoms persist a FNA of the pancreas can be considered.

The liver was heterogenous. This is a somewhat non-specific finding. Given the lack of liver enzyme elevations the significance of this is unclear.

Three view thoracic radiographs are recommended.

If weight loss persists despite treatment of hypothyroidism then consider the possibility of underlying gastrointestinal disease as there can be significant intestinal disease present despite relatively normal ultrasonographic findings. Additional evaluation can consist of a GI panel to Texas A&M for a qualitative fPLI, TLI, cobalamin and folate to try and obtain more information regarding the gastrointestinal tract.





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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