

**DATE PRESENTING CLINICAL SIGNS**

7/20/22

History of vomiting, inappetence, and weight loss. Diagnosed as hyperthyroid 5/21/22. Weight loss continued despite initiating methimazole therapy. Thyroid slightly underregulated 6/14/22. Increased methimazole dose and began mirataz PRN due to inappetence. Thyroid well regulated (1.2). Eating well on mirataz, gained 0.6 lbs, but inappetent if not given mirataz. Physical exam - mildly unkempt haircoat, Gr I-II parasternal cardiac murmur, mild dental calculus, underweight with mild-moderate muscle wasting.

PATIENT

Greta Swoboda

SPECIES

Feline

Current Medications: Methimazole 5 mg AM, 2.5 mg PM, Mirataz (7.5 mg): 1/4 tab PO Q48h PRN.
Lab Results: Baseline bloodwork unremarkable (T4 1.2), BUN and Creat low normal (not increasing with methimazole therapy), Spec fPL WNL (2.4).

Date of Previous IntraPet Ultrasound: No previous.

BREED

DSH

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

SEX

Spayed Female

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.

AGE

4/29/07

The left kidney has a normal shape and size (3.47 cm). Overall echogenicity is normal with adequate 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

7.5 Pounds

The right kidney has a normal shape and size (3.87 cm). Overall echogenicity is normal with adequate 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 in size measuring 0.33 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 in size measuring 0.19 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

Paradise AH

Spleen

The spleen is subjectively normal in size. The spleen echotexture is heterogenous and mottled, 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.

REFERRING VET

Dr. Pound

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 are somewhat discrete, hypoechoic nodules visualized within the hepatic parenchyma, three of which measure at 0.65 cm, 1.25 cm, and 1.04 cm in diameter.

INVOICE

39700

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 measured 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 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

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There are prominent mesenteric lymph nodes visualized in the cranial abdomen and around the ileocecal junction. These measure at 0.69 cm, 0.31, and 0.36 cm. The omentum is of increased echogenicity in the region of the lymph nodes.

ULTRASONOGRAPHIC FINDINGS

- Mildly mottled spleen – The diffuse splenic changes are non-specific and could be consistent with lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.
- 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.
- Hypoechoic nodules visualized within the hepatic parenchyma – These lesions could represent benign or neoplastic lesions. Recommended fine needle aspirate.
- Prominent muscularis layer of 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.
- Mild mesenteric lymphadenopathy – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

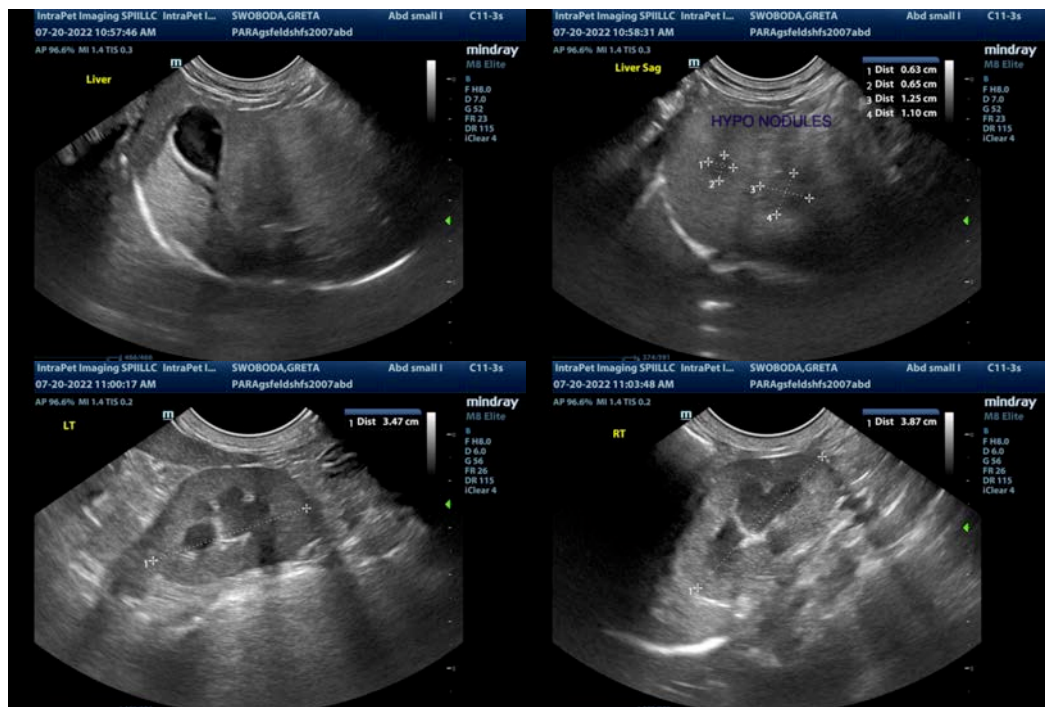
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There are some hypoechoic nodules visualized within the hepatic parenchyma. These could represent benign or neoplastic lesions. A fine needle aspirate of the liver, and ideally a hypoechoic nodule, is recommended.

Additionally, the spleen appears somewhat mottled. Consider a fine needle aspirate of the spleen.

The muscularis layer of the small intestine is somewhat prominent. This can be a normal finding in some older cats, but given the mild lymphadenopathy present at the GI signs reported, this could be more significant.

- Consider a novel protein/hydrolyzed protein prescription.
- Consider a GI panel to Texas A&M for a qualitative fPLI, TLI, cobalamin and folate to further evaluate the pancreas and small intestine.
- Recommend chronic probiotic therapy.
- If weight loss persists, consider obtaining GI biopsies.
- Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.
- While the pancreatic changes were not severe, therapy for pancreatitis could be considered while evaluating results of a diet change





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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