

**DATE PRESENTING CLINICAL SIGNS**

7/27/22 Weight loss, weakness. O believes cat is painful.

PATIENT

Current Medications: Feeding renal support diet.
 Lab Results: Borderline high thyroid and renal values for the past year. Mild non-regenerative anemia.
 Radiographs: Clear chest rads.
 Date of Previous IntraPet Ultrasound: No previous.

SPECIES

Feline

Sedation: Not required to complete full diagnostic ultrasound.
 Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**BREED**

DSH

SEX

Spayed Female

AGE

6/6/07

WEIGHT

4.25 Pounds

INTERPRETED BY

Beth Johnson, DVM
 DACVIM

IMAGING PERFORMED BY

Stephanie Pearce
 RDCS, RVT

HOSPITAL NAME

Stevenson Village VH

REFERRING VET

Dr. Feinberg

INVOICE

39876

Urinary System

The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Kidneys are normal in size, but bilaterally irregular and diffusely echogenic with decreased corticomedullary distinction and poor visualization of internal architecture. No mineral is observed. Mild bilateral pyelectasia is noted. The left kidney measured 3.32 cm. The right kidney measured 3.09 cm.

Adrenal Glands

The right adrenal gland is normal in size (0.58 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.31 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Spleen

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

Liver is subjectively enlarged (swollen contour) without disruption of architecture. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal portal vein walls and increased echogenicity relative to the spleen and falciform fat. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. Mildly, but not pathologically, distended cystic and common bile duct noted, which can be a normal anatomic variant in a senior cat. There is no evidence of effusion or inflammation.

Gastrointestinal

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min).

The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The area of the pancreas contains irregular hyperechoic pancreatic remodeling.

Free Abdomen

There is no evidence of free peritoneal effusion noted in these images.

The mesenteric lymph nodes are prominent in size with swollen capsular contour. Normal elongated shape (length to width ratio) is maintained. There is no loss of parenchymal detail.

PRIMARY FINDINGS

- **Hyperechoic hepatomegaly** – This appearance is most consistent with benign hepatic lipidosis. Infiltrative disease such as amyloidosis or round cell neoplasia, such as mast cell tumor or less likely, lymphoma, is also possible.
- **Hyperechoic pancreas** – This finding is suggestive of pancreatic fibrosis, possibly secondary to chronic pancreatitis. A TLI is recommended to rule out exocrine pancreatic insufficiency (EPI), especially if clinical signs (weight loss, diarrhea, etc.) are present.
- **Reactive mesenteric lymph nodes** – infiltrative neoplastic disease cannot be ruled out but is considered less likely.

SECONDARY FINDINGS

- **Gallbladder debris** - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness, however, it can also be associated with hepatobiliary disease in cats and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.
- **Chronic Kidney Disease with mild bilateral pyelectasia** – This appearance of the kidneys is consistent with chronic kidney disease such as chronic glomerular or interstitial nephritis, chronic pyelonephritis, etc.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is no ultrasonographically visible gastrointestinal abnormalities to support this patient's weight loss. However, gastrointestinal disease can be present without visible changes, and given the concurrent pancreatic changes in these images, a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

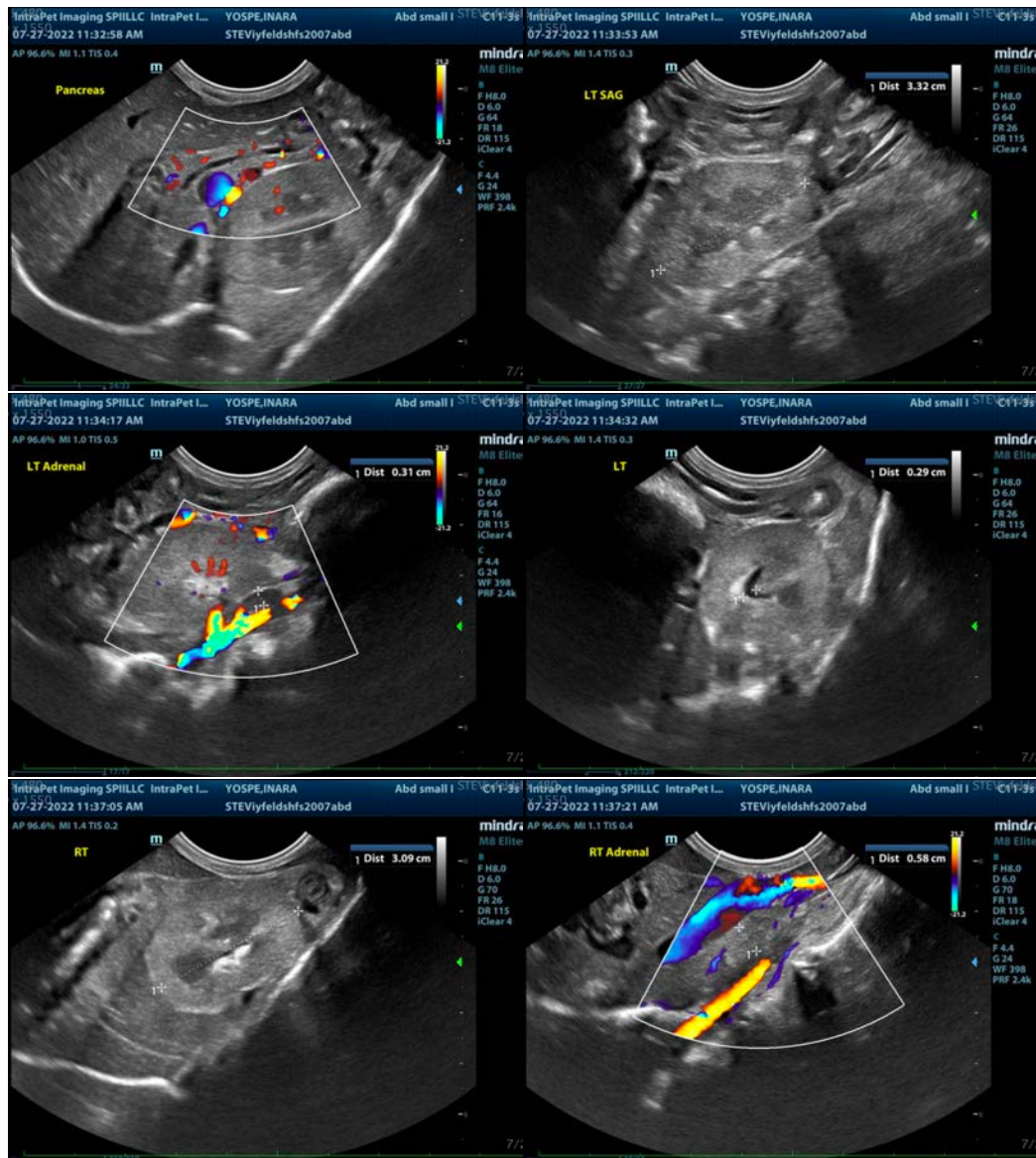
Given the patient's reported high end of normal T4, a free T4 is recommended if not recently evaluated, especially if this patient's weight loss is in the face of a normal or increased appetite.

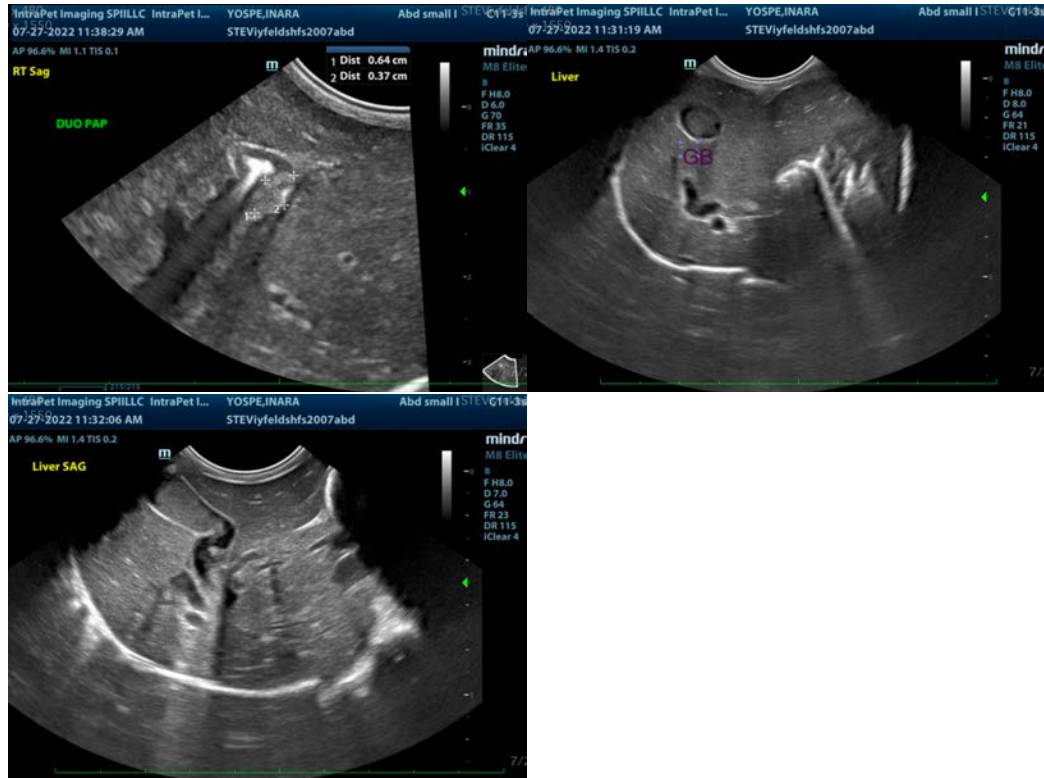
Given the mild proteinuria reported, a urine protein to creatinine ratio is recommended to further quantify the protein loss, in case proteinuria is contributing to weight loss. Blood pressure is also recommended if not recently evaluated.

A fine needle aspirate of the liver could be considered if patient's coagulation status is appropriate.

Finally, if this patient's weight loss is in the face of a decreased appetite, then supportive symptomatic care of decreased appetite, possibly secondary to kidney disease versus other is recommended in the form of antiemetics, gastroprotectants, and an appetite stimulant, if necessary.

If the hypocalcemia is persistent, recheck of an ionized calcium is recommended, and if low, calcium supplementation may also be necessary.





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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