

**DATE PRESENTING CLINICAL SIGNS**

3/3/22 Progressive weight loss, occasional vomiting. Hx of hyperT4, been well controlled since 2018. PE- moderate dental disease, grade 3-4/6 parasternal systolic heart murmur, palpable stool or mass in abdomen.

PATIENT

Grover Saul Current Medications: Felimazole 2.5mg BID since 2018.
Lab Results: Lymphopenia 842, elevated pro BNP 308, T4 3.3-remainder WNL. UA- USG 1.037, pH 6.5, Protein 2+, inactive sediment, UPC 0.6.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

7/28/07

WEIGHT

9.3 Pounds

INTERPRETED BYBeth Johnson, DVM
DACVIM**IMAGING PERFORMED BY**

Rachel Brilhart RDMS

HOSPITAL NAME

Eastern AH

REFERRING VET

Dr. Cusack

INVOICE

35908

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ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**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.

The left kidney is normal in size (4.44 cm) with increased cortical echogenicity. Normal smooth peripheral margination and shape are maintained. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

The right kidney is normal in size (4.26 cm) with increased cortical echogenicity. Normal smooth peripheral margination and shape are maintained. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Adrenal Glands

The right adrenal gland is normal in size (0.55 cm thick), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.30 cm thick), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Spleen

Spleen is subjectively enlarged in size with rounded margins but intact capsule. Parenchyma is homogeneously coarse/mottled in echotexture and normal to hypoechoic in echogenicity. No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

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 pancreas is prominent and hypoechoic to surrounding tissue with a mildly coarse parenchyma. The visible capsule is smooth and normal in contour. There is no visible over dilation of the pancreatic duct. The dilation present is considered normal for a cat. There is no evidence of active peripancreatic inflammation or effusion.

Free Abdomen

There is no evidence of peritoneal effusion. Prominent hypoechoic mesenteric lymph nodes are appreciated.

PRIMARY FINDINGS

- Coarse splenomegaly – can be associated with congestion caused by sedation (if sedated) but can also be associated with diffuse infiltrative disease. Both benign conditions such as extramedullary hematopoiesis, lymphoid hyperplasia, amyloidosis as well as infiltrative neoplastic diseases such as round cell neoplasia should be considered.
- Mesenteric lymphadenopathy – likely reactive. Infiltrative neoplasia cannot be ruled out but is considered less likely.

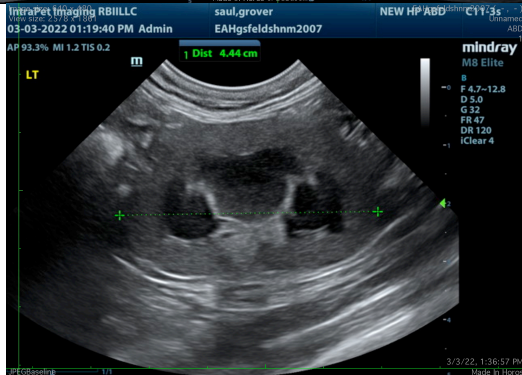
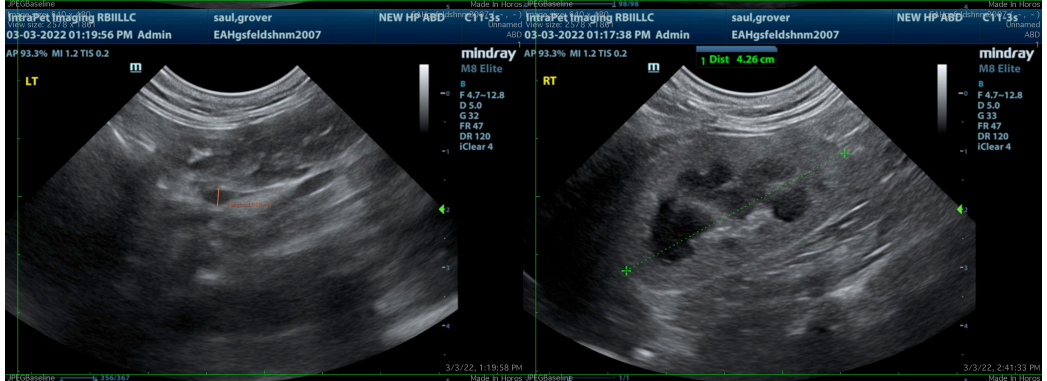
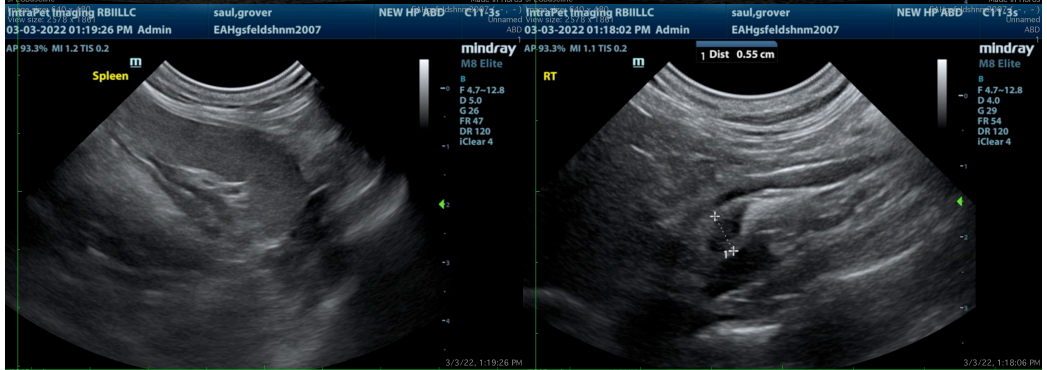
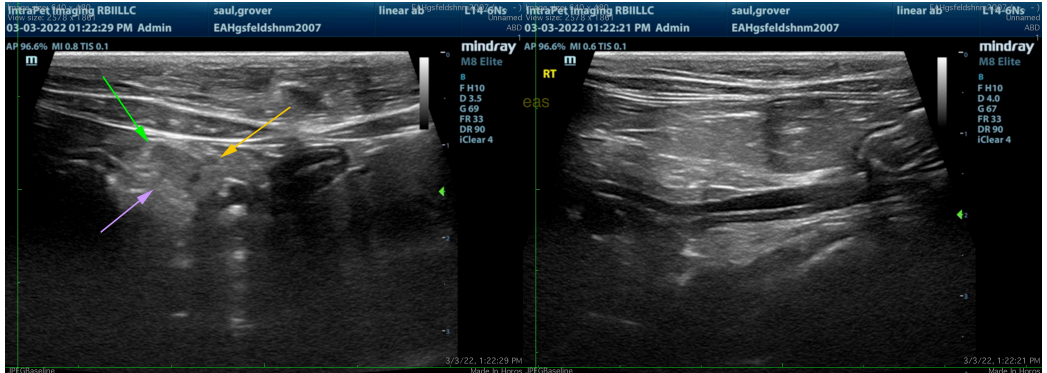
SECONDARY FINDINGS

- Prominent hypoechoic pancreas – consistent with normal age remodeling versus chronic low-grade pancreatitis.
- Hyperechoic kidneys of normal size – most consistent with normal fat deposition.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Diagnostic recommendations for this patient given the heart murmur, weight loss and pancreatic changes on ultrasound include an echocardiogram if not recently evaluated, as well as a gastrointestinal malabsorption panel to include TLI, PLI, folate and cobalamin to Texas A&M GI laboratory for further assessment of gastrointestinal and pancreatic function. A fine needle aspirate of the spleen can also be considered if patient's coagulation status is appropriate, being sure to pre-med with Diphenhydramine in the event mast cell disease is present.

Therapeutically, more aggressive management of the hyperthyroidism could be considered with a goal T4 in the low normal end of the reference range, being sure to monitor kidney values during the initial stages of more aggressive therapy, in case patient's weight loss and vomiting are still attributed to mild hyperthyroidism. If more aggressive management of hyperthyroidism doesn't result in improved clinical signs and/or there are abnormalities on the gastrointestinal malabsorption panel, biopsies of the bowel (being sure to include ileum if possible) may be necessary to definitively diagnosis of the cause of weight loss.



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.

Beth Johnson, DVM, DACVIM
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