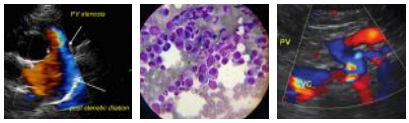
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

2/14/23

PATIENT

Rosco Baby

SPECIES

Feline

BREED

Sphynx

SEX

Neutered Male

AGE

8/9/11

WEIGHT

10 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

HOSPITAL NAME

Cat Sense Feline Hospital

REFERRING VET

Dr. Sinclair

INVOICE

21108

PRESENTING CLINICAL SIGNS

History: Rosco Baby has had a pickier appetite the past couple of months and he has lost weight. He was very recently diagnosed with hyperthyroidism but hasn't yet been started on medication. He also was just diagnosed yesterday with a supraventricular tachycardia and tachycardia-induced cardiomyopathy. He has been on Pimobendan and enalapril as of August, will be starting sotalol today once the owner gets it. He was vomiting over the weekend and last night he ate but then vomited twice, throwing up everything he had eaten. He also started with explosive diarrhea yesterday. I am concerned there is something gastrointestinal going on as well +/- there may be an enlarged spleen?

Current Medications: Miratаz Feline Transdermal Ointment- 1 1.5inch strip SID, Pimobendan 1.25 mg- 1 tablet BID, Enalapril 2.5 mg- 1 tablet BID, Simethicone- 0.3ml
Lab Results: T4 5.6.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Approved/Requested.
Imaging Performed By: Stephanie Warga RDCS, RVT.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is adequately distended with anechoic contents, as well as a very large amount of echogenic debris. No distinct cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Kidneys are bilaterally uniformly enlarged/swollen with an overall hyperechoic echogenicity and slight loss of corticomedullary definition. Normal smooth peripheral margination and shape are maintained. The renal pelvis is dilated with anechoic fluid and hyperechoic thickened pelvic fat. No overt evidence of neoplasia or mineral is observed. The perinephric area is enhanced by hyperechoic fat and mesentery. The left kidney measures 4.43 cm with pyelectasia, measuring 0.26 cm in the transverse view. The right kidney measures 4.59 cm with pyelectasia, measuring 0.24 cm in the transverse view.

Adrenal Glands

Adrenal glands are bilaterally uniformly plump egg-shaped adrenals, hypoechoic in echogenicity with bilateral dystrophic mineralization noted. This is most likely a benign age-related change. This change can be caused by chronic stress/disease, so investigation for/management of other disease (chronic kidney disease, hyperthyroidism, etc.) is recommended. The left adrenal gland measures 0.5 cm. The right adrenal gland measures 0.62 cm.

Spleen

Spleen is subjectively large in size with subtly scalloped or undulating capsular contour. Parenchyma is normal in echogenicity with a mildly coarse/heterogenous echotexture. No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

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.

Gallbladder is moderately distended with anechoic bile as well as mild suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

Gastrointestinal

The visible stomach wall is normal in thickness 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 intestine demonstrates areas of mildly thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). Small intestinal submucosa is slightly irregular, thick and hyperechoic, without evident loss of layering appreciated. The lumen of the small intestine is empty with no evidence of obstruction or foreign material.

The visible colon is normal in wall thickness and layering. Contents are consistent with liquid stool.

Pancreas

Pancreas is prominent (enlarged) in size, hypoechoic to surrounding tissue and has a mildly irregular undulating contour. Parenchyma is coarse with mixed echogenic remodeling noted. Pancreatic duct dilation is noted.

Free Abdomen

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Mild inflammatory bowel disease (IBD) pattern – Thick muscularis has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma. No aggressive lymphadenopathy, loss of layering, etc. is noted to make lymphoma more probable, but lymphoma cannot be definitively ruled out without tissue sampling.

- Chronic active pancreatitis

- Scalloped spleen – can be associated with benign or malignant infiltrative disease. Common causes include a reactive spleen secondary to immune stimulus or early infiltrative round cell neoplasia such as lymphoma or mast cell tumor.

- Pyelonephritis – These changes are most consistent with chronic pyelonephritis. Chronic scarring and fibrosis and/or chronic nephrolith passage can also result in these pelvic dilation changes. Early infiltrative disease cannot be ruled out but is considered less likely.

- Urinary bladder debris

Secondary Findings

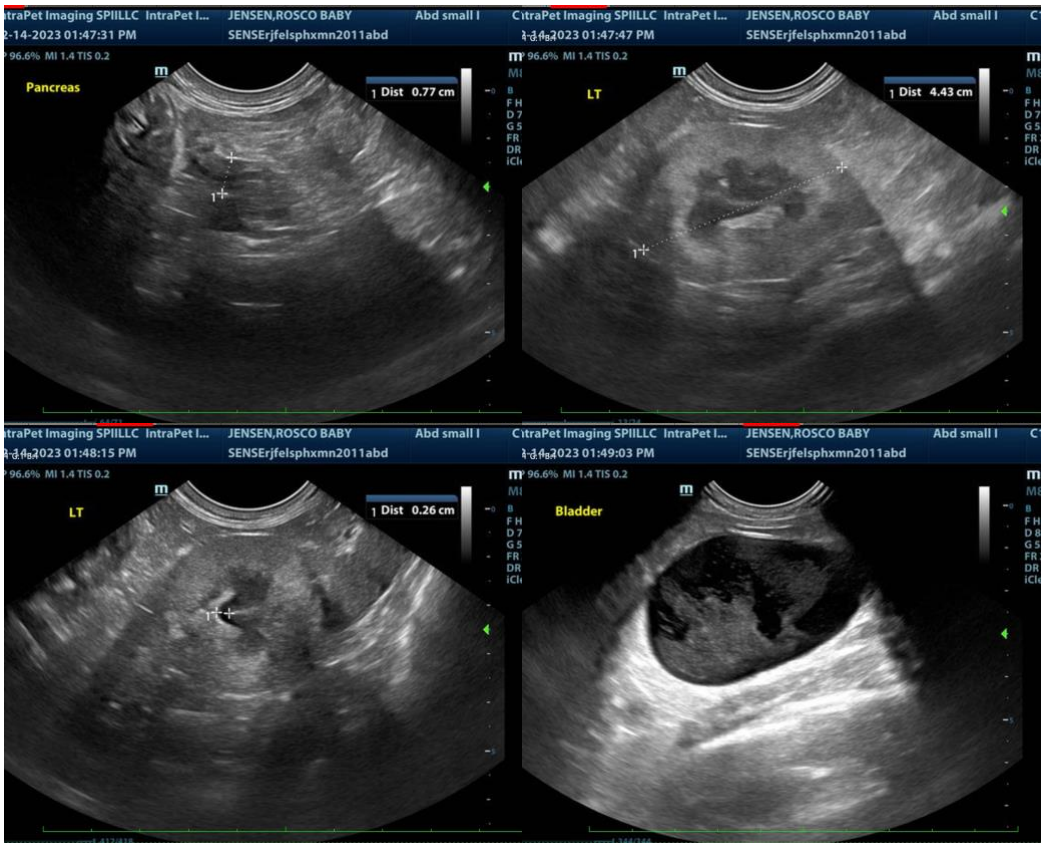
- Mild gallbladder debris – Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness, however, it can also be associated with hepatobiliary disease in cats and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

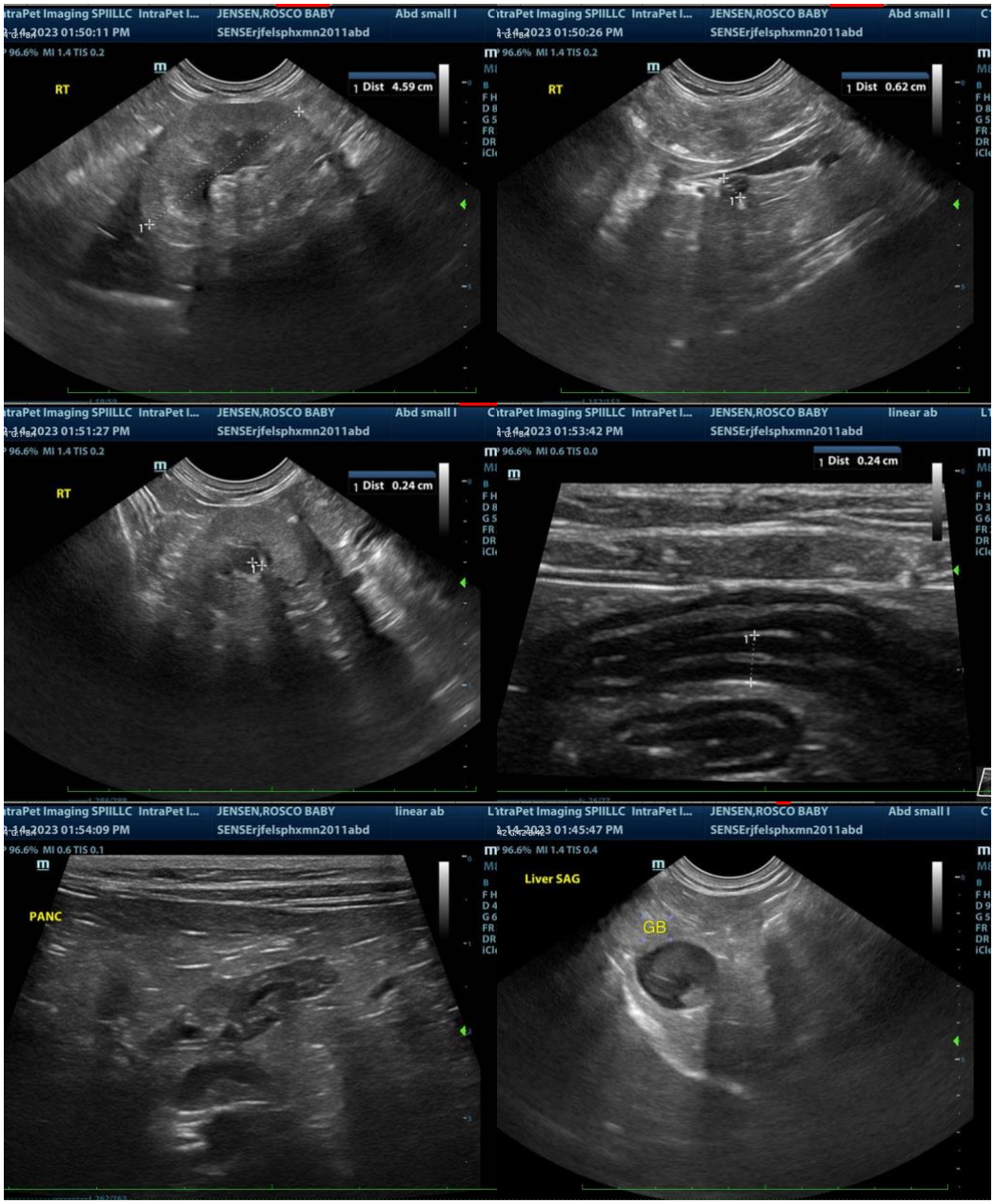
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

If not recently evaluated, urinalysis and, if indicated based on urinalysis results, urine culture is recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended.
Additionally, based on this ultrasound, this patient may have some concurrent infiltrative bowel disease, or even potentially infiltrative round cell neoplasia also affecting the spleen. Additional diagnostic considerations could include a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory, for further evaluation of GI and pancreatic function, as well as a fine needle aspirate of the spleen, if patients coagulation status is appropriate.

Alternatively, treatment of the hyperthyroidism is recommended with monitoring of clinical signs for improvement vs progression in a euthyroid state to be able to fully interpret the degree to which the possible infiltrative bowel disease is contributing to clinical signs.

In the meantime, a probiotic such as Visbiome or Proviable may help alleviate the diarrhea, in addition to antiemetics, gastroprotectants, etc., to help manage the nausea while getting the hyperthyroidism under control.

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1 Dist 4.59 cm
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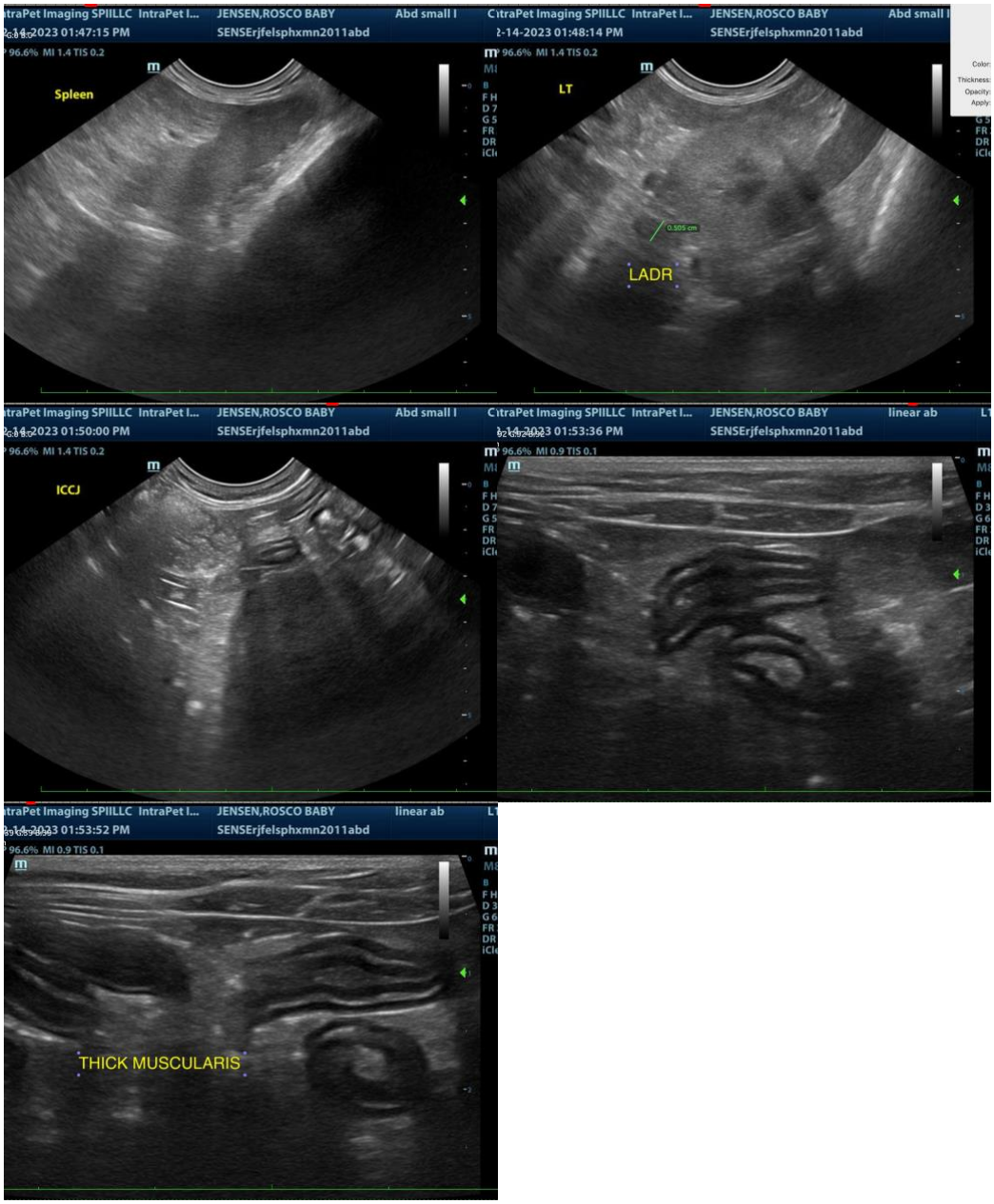
1 Dist 0.24 cm
PANC
Liver SAG
GB



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.

Beth Johnson, DVM DACVIM

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