

**DATE PRESENTING CLINICAL SIGNS**

10/26/21

Molly presented for weight loss despite a good appetite and normal energy/activity level. Molly had diarrhea for a few days approximately 2 weeks ago, last diarrhea was Sunday Oct, 17th. Normal stool most recently.

PATIENT

Molly Rufenacht

Current Medications: Iverheart monthly.

Lab Results: Total Protein 4.9 g/dL; Albumin 2.6 g/dL; Triglycerides 509 mg/dL; precision PSL 193 U/l. UA-pending.

Radiographs: Attached separately.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

SPECIES

Canine

Sedation: Sedation not required for scan.

Stat Report: STAT report not requested by the veterinarian.

BREED

Toy Poodle

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.

SEX

Spayed Female

The left kidney has a normal shape and size (3.56 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.

AGE

9/26/11

The right kidney has a normal shape and size (3.45 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

11.7 Pounds

INTERPRETED BY

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(Small Animal Internal
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Adrenal Glands

The left adrenal gland is normal in size measuring 0.47 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.

HOSPITAL NAME

Bel Air Vet Hospital

The right adrenal gland is normal in size measuring 0.42 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.

REFERRING VET

Dr. Young

Spleen

The spleen is subjectively normal in size and the echotexture is homogenous. The splenic capsule is smooth with no visible irregularities. Rare discrete focal hyperechoic, perivascular parenchymal abnormalities are present. The appearance of these lesions is most consistent with benign splenic myelolipomas. A hyperechoic foci is visualized measuring 0.62 cm. The blood flow through the hilus and splenic parenchyma appears normal.

INVOICE

26659

Liver

The liver is subjectively small in size with normal echogenicity. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm 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 appears subjectively, mildly increased. Bowel loops follow a typical curvilinear path with distinct wall layering. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed. Duodenum wall measured 0.47 cm. Jejunum wall measured 0.32 cm.

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, hypoechoic and mottled 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

Scant anechoic free fluid is visualized. No lymphadenopathy. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is generally of increased echogenicity.

Other

The aorta appeared prominent.

A brief view of the heart was submitted. No pericardial effusion was seen.

PRIMARY FINDINGS

- Prominent, mottled pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Subjectively normal/small liver – recommend bile acids evaluation.
- Moderate gallbladder sludge – The significance of the aggregated gallbladder sludge is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.
- Subjectively thickened small intestine – The mild small intestinal wall changes may be a normal variant in this patient or could be consistent with an inflammatory process (e.g., inflammatory bowel disease).
- Scant anechoic free abdominal fluid with hyperechoic omentum

SECONDARY FINDINGS

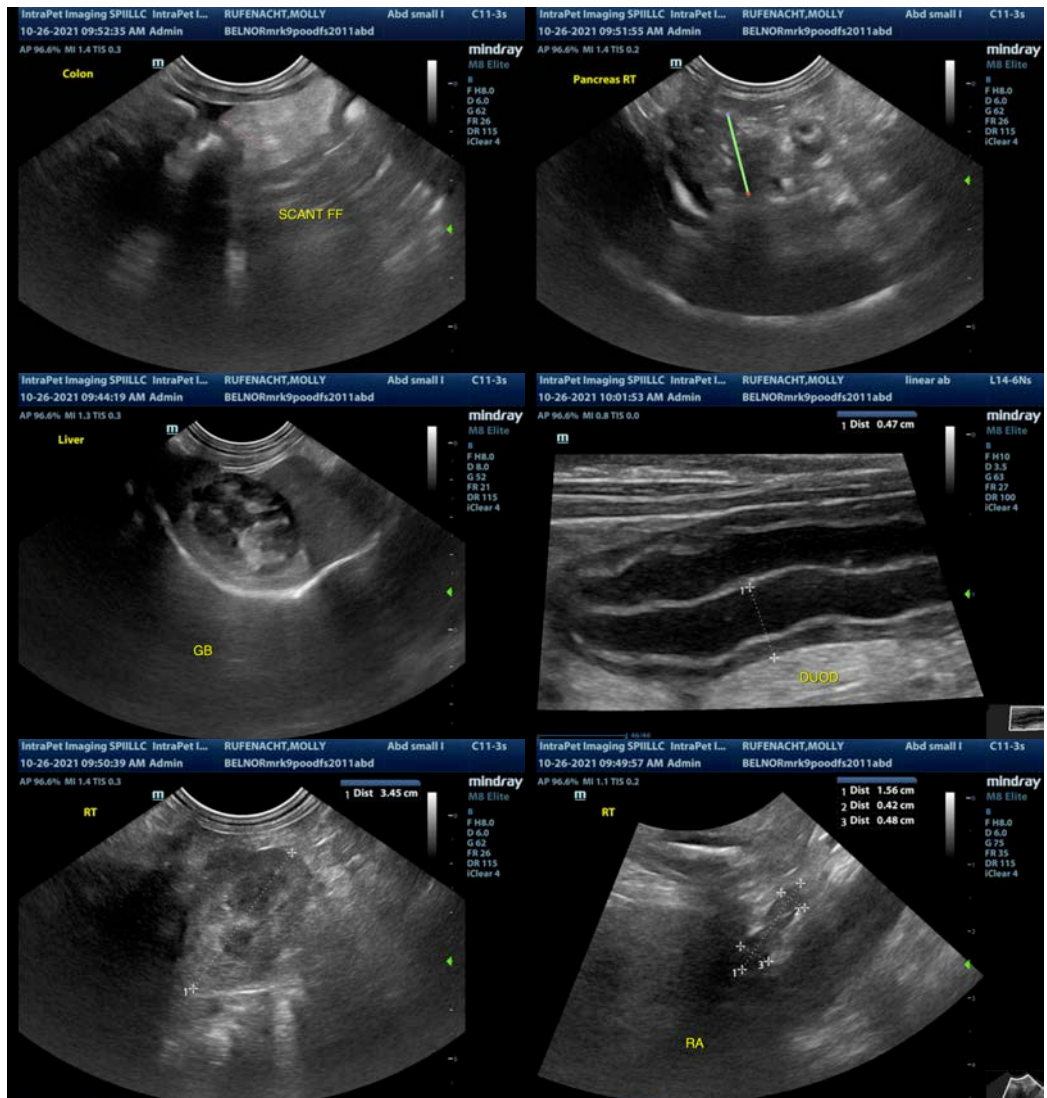
- Hyperechoic foci in the spleen – most consistent with benign myelolipomas, but a neoplastic process cannot be 100% ruled out. Recommended continued monitoring.

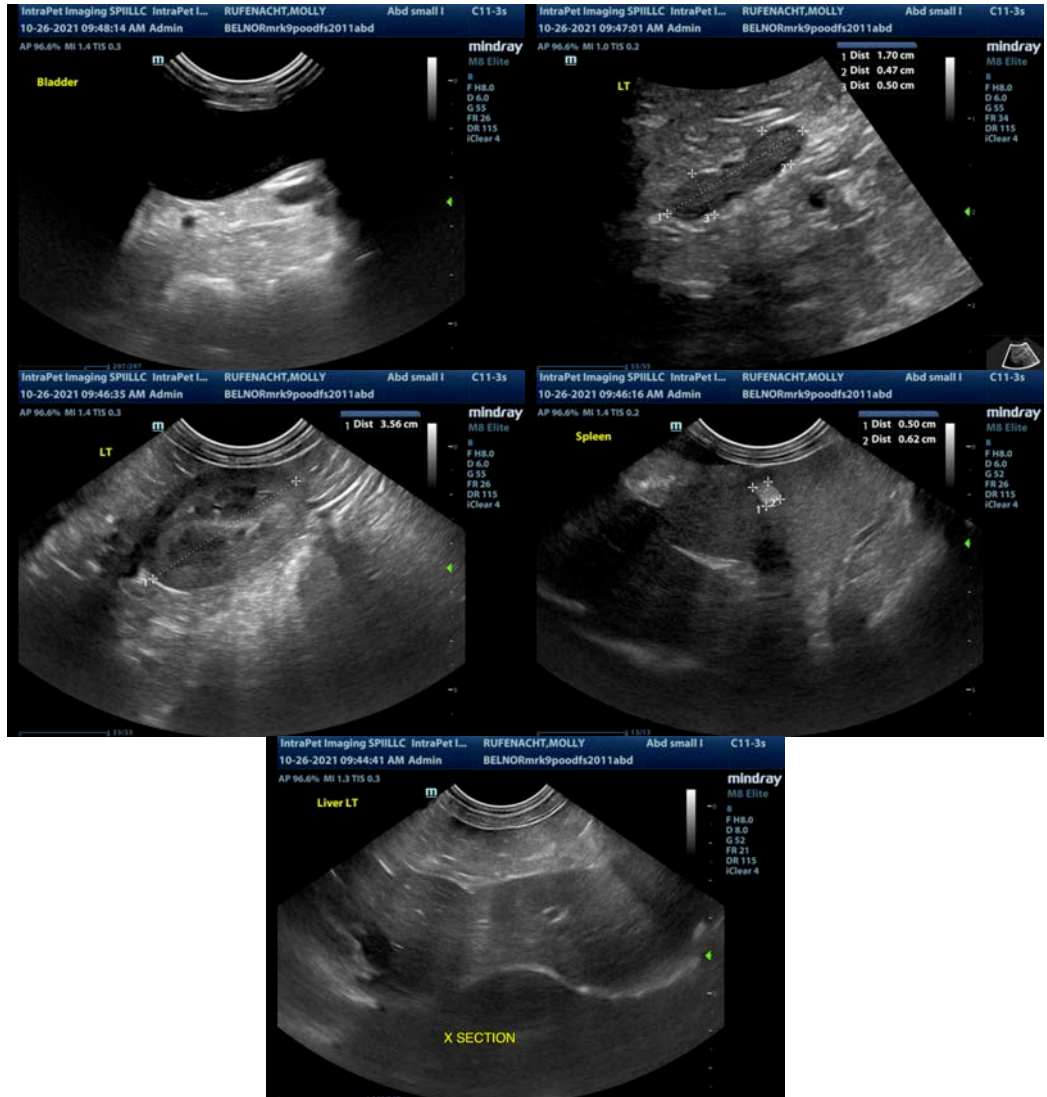
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No focal lesions are identified in the abdomen to explain the low albumin levels. This could be a scenario where there a combination of factors, as a 2.6 albumin should not typically cause ascites.

- Recommend a GI panel with a quantitative PLI, TLI, cobalamin and folate to look for evidence of pancreatic/small intestinal disease.
- Recommend pre- and post-prandial bile acids to look for evidence of liver dysfunction
- Recommend urinalysis +/- culture and urine protein/creatinine ratio to look for evidence of protein loss from the kidneys.

Hopefully, based on these test results you can narrow the cause of the protein loss down and consider either further workup for proteinuria, hepatic dysfunction (biopsy +/- CT scan), or GI disease (ideally recommended biopsies). If you're unable to narrow the cause down based on that testing, then consider such differentials as vasculitis, vascular obstruction, lymphangiectasia, etc.





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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