

**DATE PRESENTING CLINICAL SIGNS**

3/9/2022

History: 9 lb weight loss with normal appetite. No vomiting/diarrhea.

PATIENT

Chronic history (1.5 year) of heavy panting unresponsive to pain medications (NSAIDs, gabapentin), anxiolytics (trazodone, higher dose Gaba, Zylkene), Denamarin, melatonin. Previous workup (chest rads, ultrasound 1 year ago) unremarkable. Blod pressure normal repeatedly.

Lucy Rhodes

Current Medications: Proin 50mg BID, alternating with 1 SID, Gabapentin 300mg BID, Provioble. Gabapentin 900mg prior to scan.

SPECIES

Canine

Lab Results: Chronic/stable liver enzyme elevations: ALT 240, ALP 308 Tx GI Panel: normal cortisol. Low cobalamin: 177 (251-908). PLI/TLI/folate normal. UA +/- UPC to be performed at time of ultrasound. Now normal T4; was low previously with equivocal Michigan panel.

BREED

Border Collie Mix

Radiographs: Chest rads 2/15/22 normal/stable from 1 yr ago.

Abd rads 2/15/22; enlarged spleen (stable from 1 yr ago), no obvious masses.

SEX

Spayed Female

Date of Previous IntraPet Ultrasound: 1/28/2021

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

AGE

11/1/2007

Imaging Performed By: Stephanie Pearce RDCS, RVT.

WEIGHT

52.8lbs

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**INTERPRETED BY**Andrea Nicastro,
DMV, Diplomate
DACVIM (Small Animal
Internal Medicine)**Urinary System**

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

HOSPITAL NAME

Paradise AH

The left kidney is normal size (5.67 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (6.12 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

REFERRING VET

Dr. Riehl

Adrenal Glands

The left adrenal gland is borderline enlarged (1.00 cm at cranial pole) (0.71 cm at caudal pole) (2.53 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

INVOICE

10522

The right adrenal gland is borderline enlarged (0.83 cm at cranial pole) (0.73 cm at caudal pole) (2.51 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is diffusely heterogenous in appearance. No distinct focal lesions are observed. Splenic vasculature appears normal with no evidence of thrombosis.

Liver

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and subtly heterogenous in appearance. A 3.49 cm ill-defined hyperechoic is observed deep on the right side. A 1.35 cm cystic nodule is also observed near the diaphragm. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

The gall bladder is moderately distended. The wall is normal in thickness. A small amount of aggregated echogenic adhered debris/sludge is observed in the lumen, near the gall bladder neck. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive or overt infiltrative disease is noted.

Pancreas

The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

Free Abdomen

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

Other

A uterine stump is visible (0.66 cm in width). No obvious pathology is observed.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The diffuse hepatic parenchymal changes are most consistent with a benign hepatopathy (i.e., regenerative nodular hyperplasia and/or vacuolar hepatopathy). The small cystic hepatic nodule near the diaphragm may represent a benign incidental finding. However, emerging neoplasia cannot be completely excluded.
- The splenic parenchyma changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis or splenitis with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia). Changes are similar to the previous sonogram.

Secondary Findings

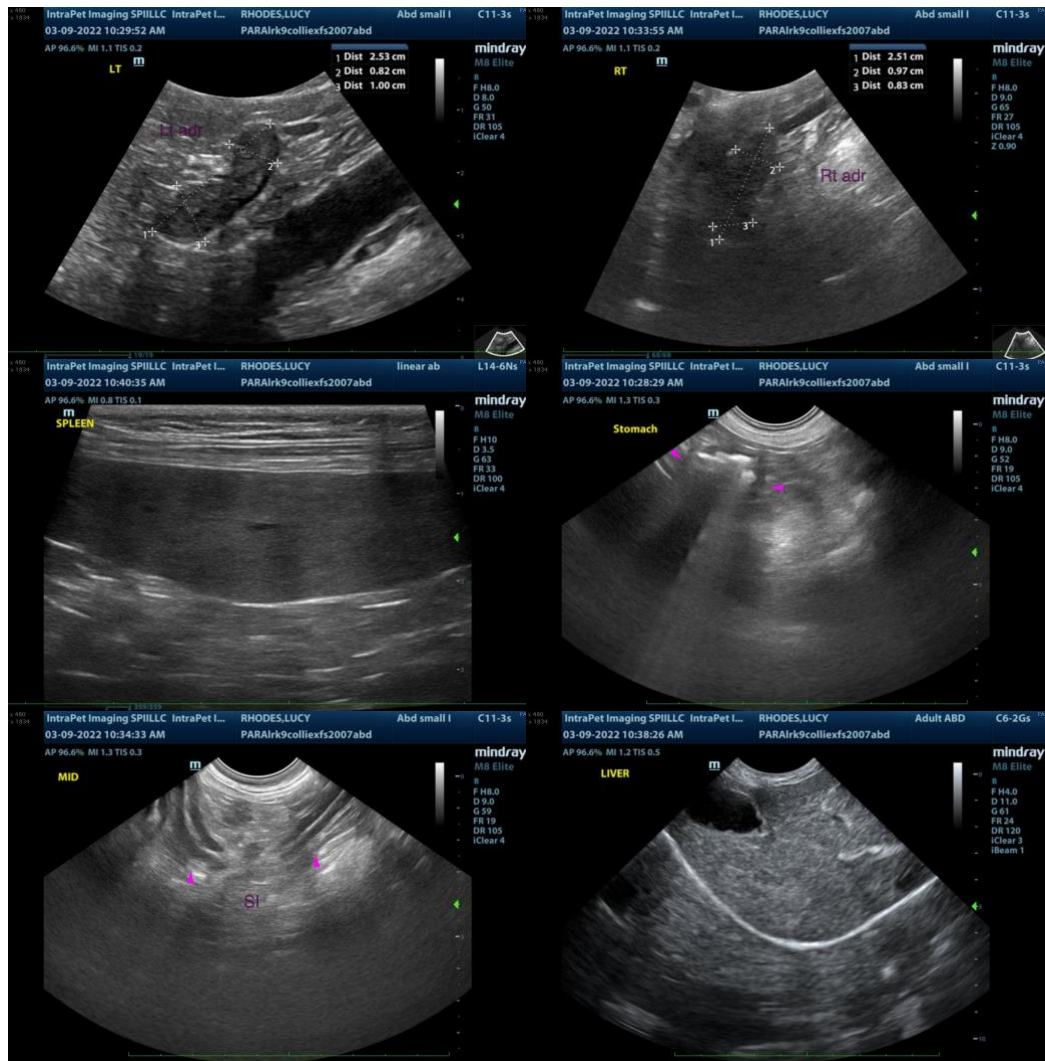
- Borderline bilateral adrenomegaly.
- Minor non-specific age-related renal changes.

- Uterine stump – incidental.

**An obvious cause for the patient’s weight loss is not identified in this study. Considerations include occult neoplasia, sarcopenia, maldigestion/malabsorption, underlying metabolic issue, other.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Given the hypcobalaminemia, B12 supplementation is recommended. Also consider transitioning to a hypoallergenic diet, if the patient will tolerate it. Ultimately GI biopsies may be necessary to get a definitive diagnosis. However, given the patient’s age, the benefits of biopsies must be weighed against the risks of anesthesia.



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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