



PATIENT PRESENTING CLINICAL SIGNS

PATIENT
Luke Quevedo

SPECIES
Feline

BREED
Siamese

SEX
Neutered Male

AGE
16 years

WEIGHT
5.2 lbs

INTERPRETED BY
Andrea Nicastro,
DVM, Diplomate
ACVIM (Small Animal
Internal Medicine)

IMAGING PERFORMED BY
Dr. Jolee Stegemoller

HOSPITAL NAME
No Idaho AH VCA

REFERRING VET
Dr. Talitha Neher

INVOICE
11278

DATE
7.28.22

History: History: hx of chronic viral URI, renal dz, anemia. Historically eaten/prefers dry food with no adverse effects. No hx of prior dietary sensitivity. P had acute large bowel diarrhea earlier this summer with intermittent episodes which respond to Provable, canned i/d food but recur whenever P eats soley dry food. O has transitioned multiple times from canned to mixed with recurrence of frequent, loose, watery stools as soon as fully on dry diet. On last event, i/d dry food was used but ineffective. Solely canned diet is not practical for o. Primary reason for ultrasound referral: assess progression of renal changes, look for evidence of primary GI dz contributing to large bowel diarrhea

Abnormal PE/Chem/CBC/UA Results: Abnormal laboratory findings: Hx of non-regenerative anemia; recheck CBC today marked improvement hct. Recent fecal/giardia Ag neg/neg Abnormal physical exam findings: conjunctivitis and nasal discharge consistent chronic viral sinusitis/rhinitis with ocular component; dull coat

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** wall is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. A small amount of suspended, echogenic debris is observed within the lumen. 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.

The **left kidney** is upper limits of normal size (4.53 cm in length); with a slightly irregular shape. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. Several cortical infarcts are visualized. Trace pyelectasia is present. There is no evidence of hydroureter. Renal vasculature is normal.

The **right kidney** is borderline small in size (3.18 cm in length); with a slightly irregular shape. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. Several cortical infarcts are visualized. There is no evidence of pyelectasia or hydroureter. Renal vasculature is normal.

Adrenal Glands

The **left adrenal gland** is normal size (0.41 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

The **right adrenal gland** is normal size (0.26 cm cranial; 0.31 cm caudal; 1.04 cm in length). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The **spleen** is subjectively normal in size (0.68 cm in width at the level of the hilus) with slight rounding at the caudal aspect. There is appropriate echogenicity and echotexture. Several hyperechoic nodules are observed throughout the organ. Splenic vasculature is normal.

Liver

The **liver** is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative, or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed. The portal vein to caudal vena cava ratio is approximately 1: 1.

The **gall bladder** lumen is moderately distended. The wall is thin and smooth. A scant amount of gravity dependent, echogenic debris is observed within the lumen. The cystic and common bile ducts are normal.

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 pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall is normal to moderately thickened (up to 0.40 cm) with a normal layering pattern and appropriate mural detail. There is disruption in the normal 1:3 muscularis: mucosal ratio in most segments. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

Pancreas

The right limb of the **pancreas** is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

Free Abdomen

No free fluid is observed. A 1.10 cm, slightly irregular, mesenteric **lymph node** is visualized. Surrounding mesentery is hyperechoic.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The small intestinal wall changes could be consistent with inflammatory bowel disease or emerging lymphoma.
- The prominent mesentery lymph node could be consistent with lymphoid hyperplasia, reactive lymphadenopathy or infiltrative neoplasia (i.e., lymphoma).

Secondary Findings

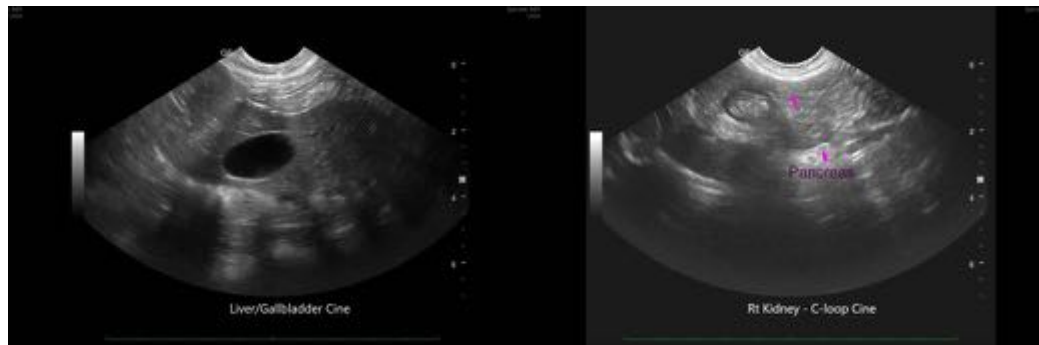
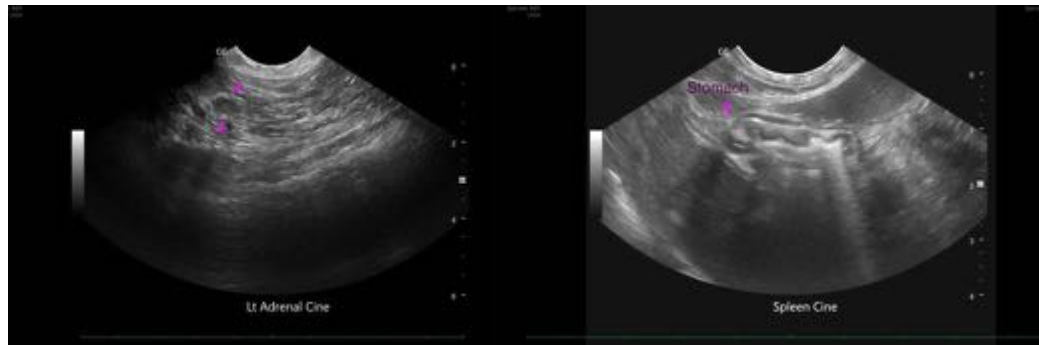
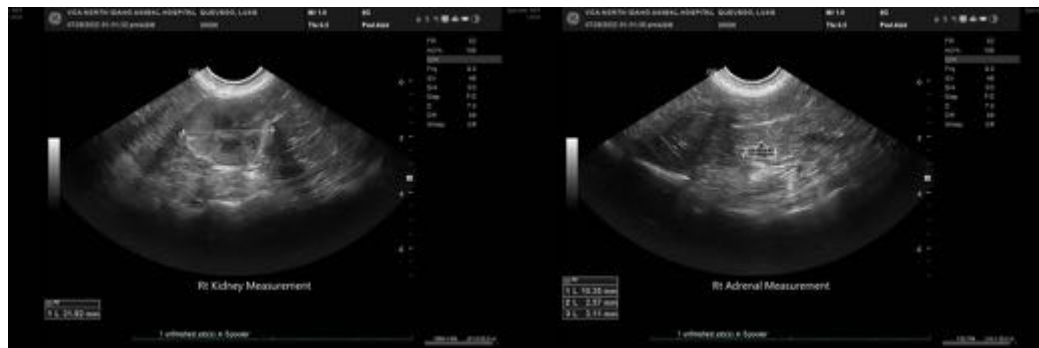
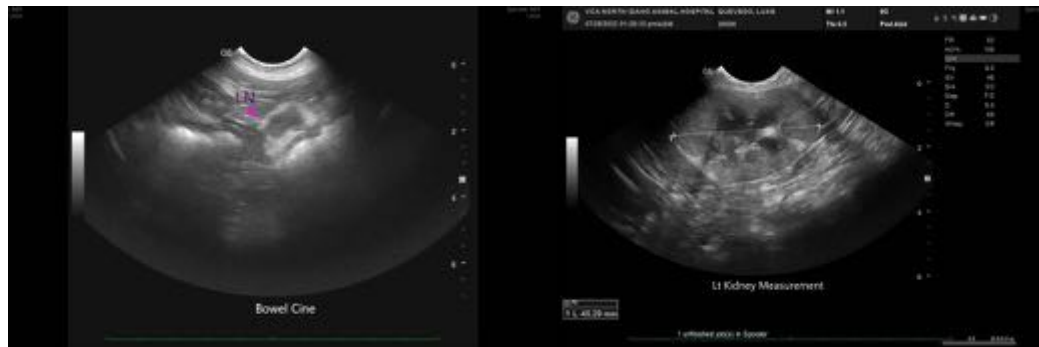
- Minor age-related pancreatic remodeling
- The hyperechoic splenic nodules trends toward the benign (i.e., myelolipomas) with a lower possibility of emerging neoplasia.
- Bilateral, chronic age-related renal changes with dystrophic mineralization and cortical infarcts

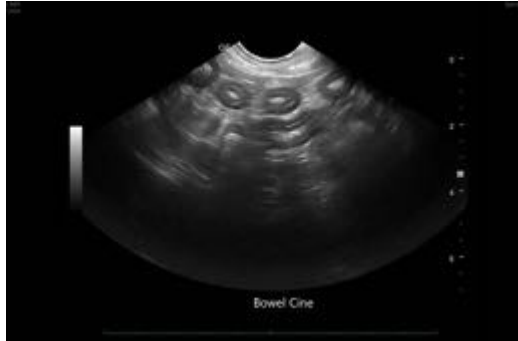
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given the clinical history and sonographic changes, consider the following:

1. Prophylactic deworming with fenbendazole (despite the negative fecal evaluation)
2. Also consider empirical treatment for small intestinal bacterial overgrowth with a 4-week course of Tylosin.
3. Malabsorption panel (serum cobalamin and folate, TLI and PLI)
4. 6-week hypoallergenic diet trial (dry and/or canned)
5. Ultimately, gastrointestinal biopsies (endoscopic or surgical) would be necessary to get a definitive diagnosis. If surgical biopsies are pursued, the prominent abdominal lymph node should also be sampled. Thoracic radiographs should be performed prior to anesthesia to assess cardiopulmonary status. If biopsies are not pursued, consider empirical treatment for inflammatory bowel disease (i.e., corticosteroids +/- hypoallergenic diet), as long as the client understands the risks of treatment

without a definitive diagnosis.





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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