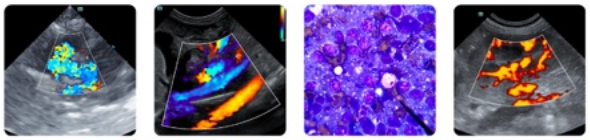


PATIENT

Thomas Cooley

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Neutered male

AGE

9 years

WEIGHT

14.9 lbs

INTERPRETED BY

Alicia Angosto Guerrero, DMV, PgDip, MSc.

IMAGING PERFORMED BY

Dr. Isaac

HOSPITAL NAME

Valley West & Elk Valley VH

REFERRING VET

Dr. Isaac

INVOICE

74420

DATE

4/13/26

PRESENTING CLINICAL SIGNS

History: History of intermittent vomiting and decreased appetite. Currently eating ZD food as a food trial.
Owner reports that he only has a BM every other day normally, can go longer so I am concerned that constipation may be part of the issue but would like to rule out other abnormalities.
Abnormal PE/Chem/CBC/UA Results: CBC/Chem NSF on 4/9/2026 T4 1.7 6 months ago UA showed USPG of 1.050 with mild proteinuria

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder lumen is underdistended, and the wall measures 2.06 mm and appears smooth (due to underdistension, wall measurement may be overestimated). The urine is turbid with abundant suspended echoes and mineral sediment. The bladder neck and proximal urethra appear normal. No uroliths are identified.

The left kidney is normal in shape and size (4.32×2.46 cm), with cortical thickness measuring 0.45 cm in the sagittal plane. The renal cortex is hyperechoic compared to the hepatic parenchyma. Corticomedullary ratio is within normal limits, and corticomedullary distinction is preserved. There is no evidence of pyelectasia, nephrolithiasis, or hydronephrosis.

The right kidney is normal in shape and size (4.25×2.64 cm), with cortical thickness measuring 0.45 cm in the sagittal plane. The renal cortex is hyperechoic compared to the hepatic parenchyma. Corticomedullary ratio is within normal limits, and corticomedullary distinction is preserved. There is no evidence of pyelectasia, nephrolithiasis, or hydronephrosis.

Adrenal Glands

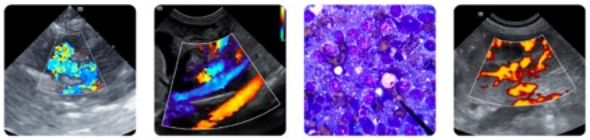
Dorsoventral diameters measured in the sagittal plane: the left adrenal gland measures 0.32 cm at both cranial and caudal poles, which is within normal limits for a cat (typically <0.4–0.45 cm). The right adrenal gland is not confidently visualized.

Spleen

Splenic thickness is 0.89 cm. The parenchyma demonstrates normal echogenicity and fine homogeneous echotexture without focal parenchymal abnormalities. The splenic capsule is smooth and regular.

Liver

The liver is subjectively normal in size, with sharp edges and a regular contour. The liver parenchyma looks uniform and isoechoic compared to the falciform fat, with a normal echotexture. No hepatic lymphadenopathy is observed.



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The gallbladder is normally distended, with a thin wall and predominantly anechoic contents, containing a minimal amount of biliary sludge. The common bile duct measures 3.67–2.34–1.40 mm from proximal to distal segments, which is within normal limits for a cat (generally ≤4 mm).

Gastrointestinal

The stomach is empty and folded, with mural thickness of 2.08 mm and preserved wall layering, which is within normal limits (<3 mm).

The pylorus measures 3.40 mm (within normal limits). The duodenum measures 1.90 mm (within normal limits, typically <4 mm). The jejunum measures 2.59 mm (within normal limits). Layer measurements: mucosa 0.68 mm, submucosa 0.73 mm, muscularis propria 1.00 mm. The muscularis-to-mucosa ratio is approximately 1.47, which is increased (normal typically <0.5–0.6 in cats). Wall layering is preserved. The ileum measures 2.84 mm (within normal limits). Layer measurements: mucosa 0.41 mm, submucosa 0.99 mm, muscularis propria 1.10 mm. The muscularis-to-mucosa ratio is approximately 2.68, which is markedly increased. Wall layering is preserved. The ileocecal junction is not visualized.

The colon measures 0.77 cm in diameter, containing a small amount of formed feces.

Pancreas

The evaluated pancreatic areas do not show evidence of overt inflammation or neoplastic disease.

Free Abdomen

No sonographic evidence of abdominal effusion, peritonitis, or lymphadenomegaly is identified. The iliac trifurcation appears normal.

PRIMARY FINDINGS

- Markedly increased muscularis-to-mucosa ratios in jejunum and ileum with preserved wall layering.

SECONDARY FINDINGS

- Bilateral renal cortical hyperechogenicity.
- Turbid urine with abundant suspended echoes and mineral sediment.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The most relevant finding is the increased muscularis-to-mucosa ratio within the small intestine, particularly at the ileum, where the values are clearly above accepted feline reference ranges (normally <0.5–0.6). This pattern, characterized by disproportionate muscularis thickening with preserved wall layering and normal overall wall thickness, is well recognized in cats with chronic enteropathy.
The primary differential considerations include inflammatory bowel disease and low-grade intestinal lymphoma, between which there is substantial ultrasonographic overlap. In this case, the absence of

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lymphadenomegaly, focal masses, or loss of wall layering supports a more indolent and diffuse process; however, imaging alone does not allow definitive differentiation.

No ultrasonographic evidence is identified to support clinically significant constipation.

The pancreas appears unremarkable, although pancreatitis cannot be excluded given the known limitations of ultrasound in feline patients.

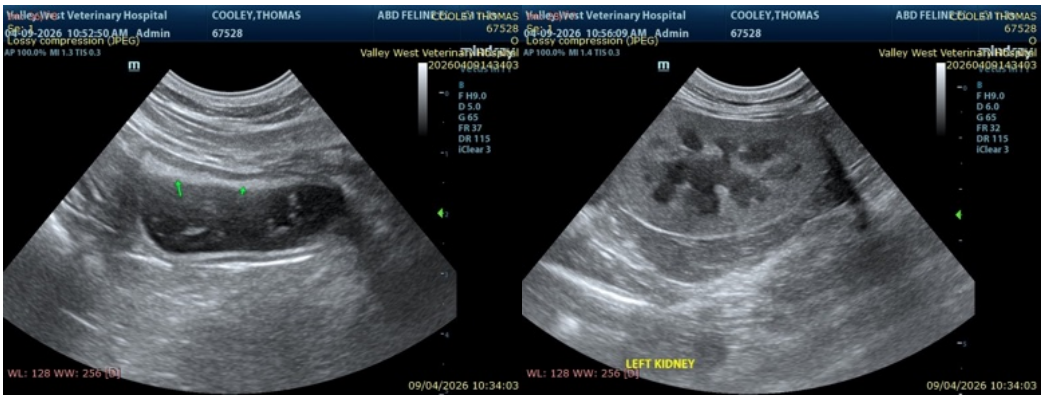
The bilateral renal cortical hyperechogenicity, in the context of preserved architecture and previously adequate urine concentrating ability, is most consistent with chronic or incidental renal change.

The urinary bladder sediment is a nonspecific finding and should be interpreted alongside urinalysis results.

Recommendations

- Further characterization of the intestinal disease is advisable, particularly through assessment of serum cobalamin (with or without folate), given the degree of ileal involvement.
- Evaluation of pancreatic lipase (Spec fPL) would also be reasonable to screen for concurrent pancreatitis.
- Clinical response to the current dietary trial should be carefully assessed, as lack of improvement would make food-responsive enteropathy less likely. If gastrointestinal signs persist or progress, intestinal biopsy remains the only reliable method to distinguish between inflammatory disease and low-grade lymphoma and should be considered in discussion with the attending clinician.
- Correlation of the urinary findings with a complete urinalysis (including sediment evaluation and, if indicated, UPC) is recommended, along with periodic monitoring of renal parameters given the cortical echogenicity observed.

Final diagnostic and therapeutic decisions should be made by the attending veterinarian, who can best integrate these findings with the patient's clinical status.



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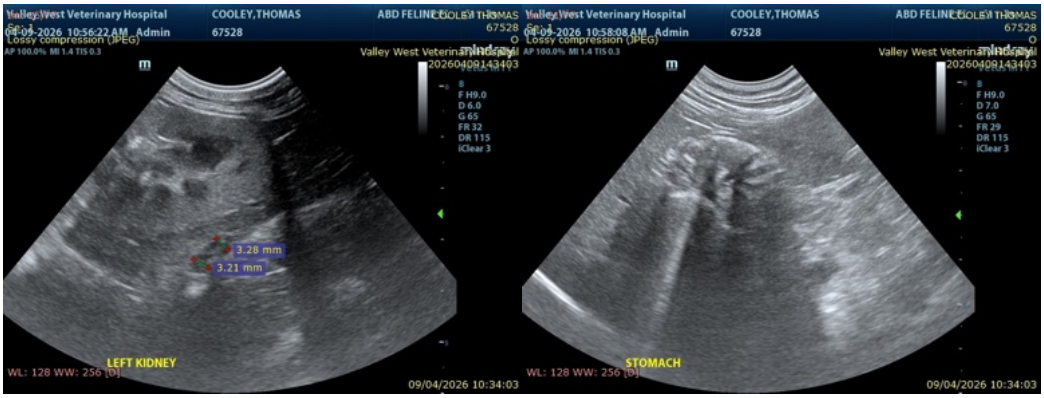

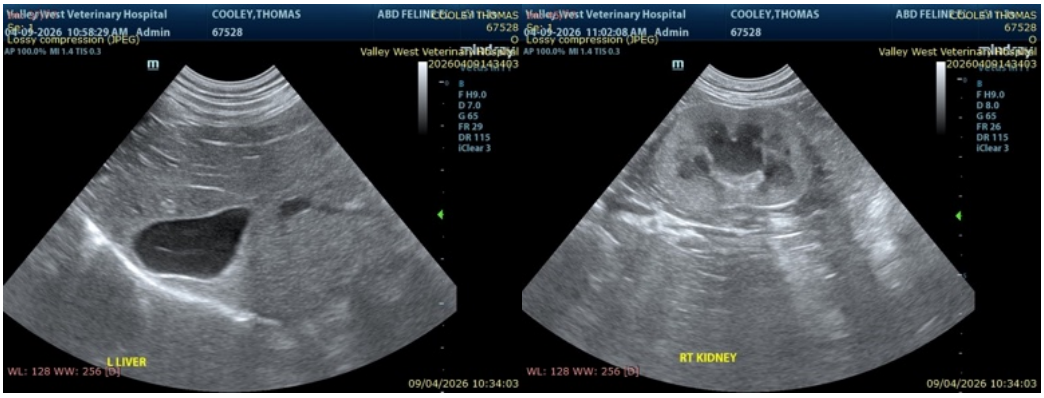

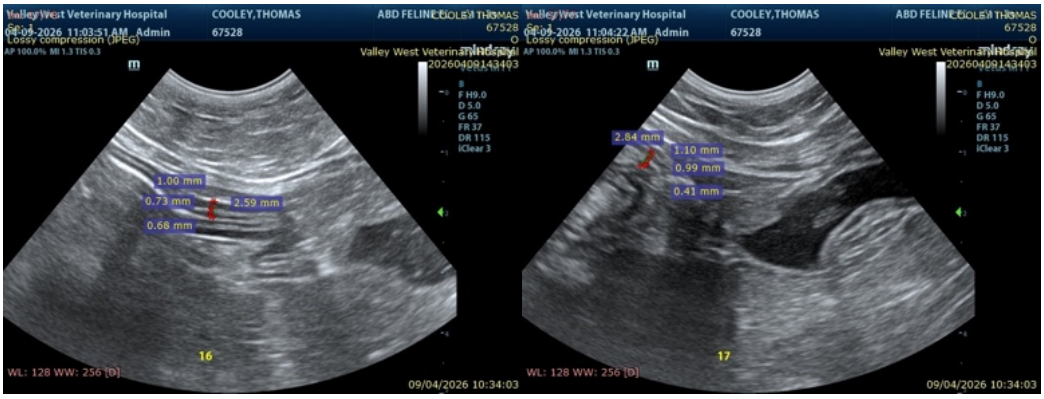

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Alicia Angosto Guerrero, DMV, PgDip, MSc.

info@SonoPath.com