



## PATIENT

Leopold Carlozo

## SPECIES

Feline

## BREED

Domestic Shorthair

## SEX

Neutered male

## AGE

13 years

## WEIGHT

13.1 lbs

## INTERPRETED BY

Alicia Angosto  
Guerrero, DMV,  
PgDip, MSc.

## IMAGING PERFORMED BY

Jessy Butcher

## HOSPITAL NAME

Healing Paws

## REFERRING VET

Dr. Klickman

## INVOICE

74022

## DATE

## PRESENTING CLINICAL SIGNS

- 02/27/26 malodorous stools going on for ~ 4-5 years – owner changed to a senior food which seemed to help but then got stinky. Again last year when had an increase in vomiting and weight loss, this time no improvement with rx diet change. Normal stools, not too hard, no blood or mucous noted. Previous rDVM prescribed anti-nausea – O couldn't pill cat
- E/D: decreased appetite past 6 months (RC Select Protein - 1/2c dry + 1/2c wet)- initially helped but then not working as well again
- Vomit: P has vomited 3x this past week with the most recent having been earlier today.
- Recheck 1 month later- Tried starting B12, owner unable to give consistently, using mirataz q 2-3 days, has helped with appetite and weight now stable, no change to stools or vomiting frequency.
- 10/2025 normal Chem, mild eosinophilia otherwise normal CBC, T4 (3.2)

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The urinary bladder is normally distended. The bladder wall is thin, smooth, and regular. The luminal contents are anechoic. Normal appearance of the bladder neck and proximal urethra. No evidence of urolithiasis or inflammatory or proliferative changes is identified.

The left kidney is normal in shape and size, measuring 4.04×2.38 cm in the sagittal plane. Cortical thickness is 0.35 cm. The cortex is hyperechoic compared to the hepatic parenchyma. The corticomedullary ratio is within normal limits, and corticomedullary definition is preserved. There is no evidence of pyelectasia, nephrolithiasis, or hydronephrosis. Color Doppler demonstrates a normal vascular pattern.

The right kidney is normal in shape and size, measuring 4.34×2.64 cm in the sagittal plane. Cortical thickness is 0.40 cm. The cortex is hyperechoic compared to the hepatic parenchyma. The corticomedullary ratio is within normal limits, and corticomedullary definition is preserved. There is no evidence of pyelectasia, nephrolithiasis, or hydronephrosis. Color Doppler demonstrates a normal vascular pattern.

### Adrenal Glands

Dorsoventral diameters measured in the sagittal plane: The left adrenal gland measures 0.30 cm at the cranial pole and 0.29 cm at the caudal pole. The right adrenal gland not confidently visualized

### Spleen

Splenic thickness is 0.75 cm. The parenchyma demonstrates normal echogenicity and fine homogeneous echotexture without focal parenchymal abnormalities. The splenic capsule is smooth and regular.



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## 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.

The gallbladder lumen is normally distended. The wall is thin and the contents are primarily anechoic. No evident dilation of the cystic duct or common bile duct is observed.

## Gastrointestinal

The stomach is empty and folded, with a wall thickness of 1.67 mm and preserved layering. The pylorus measures 4.95 mm.

Duodenum: 2.15 mm. Jejunum: total wall thickness 2.61 mm, with mucosa 0.92 mm, submucosa 0.99 mm, and muscularis propria 0.67 mm. Wall layering is preserved. Ileum: total wall thickness 1.96 mm, with mucosa 0.39 mm, submucosa 0.90 mm, and muscularis propria 0.63 mm. Wall layering is preserved. The ileocecal junction was not visualized.

Colon: 0.72 mm, containing formed feces in the descending segment.

## Pancreas

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

## Free Abdomen

No abdominal effusion or signs of peritonitis are present.

Cranial mesenteric lymph nodes measure 5.86–5.98 mm, are normal in shape, and hypoechoic, with mild hyperechogenicity of the surrounding mesenteric fat.

Ileocecal lymph nodes are not visualized; the surrounding region appears unremarkable.

The region of the iliac trifurcation appears normal.

## PRIMARY FINDINGS

- Mild jejunal and ileal muscularis thickening (ileal muscularis-to-mucosa ratio >1)
- Cranial mesenteric lymph nodes at the upper limit of normal with mild perinodal fat hyperechogenicity.

## SECONDARY FINDINGS

- Mild bilateral renal cortical hyperechogenicity.



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## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Intestinal wall thicknesses remain within accepted feline reference ranges, and layering is preserved throughout, which does not support high-grade infiltrative disease. However, there is mild muscularis thickening in both the jejunum and ileum. In the jejunum, the muscularis relative to the mucosa yields a ratio of approximately 0.7, which is mildly increased. In the ileum, the muscularis exceeds the mucosal thickness, resulting in a muscularis-to-mucosa ratio  $>1$ , which is considered abnormal in cats. This pattern is classically associated with chronic enteropathy, including both inflammatory bowel disease and low-grade (small cell) lymphoma, and does not allow reliable differentiation between these entities on ultrasound alone.

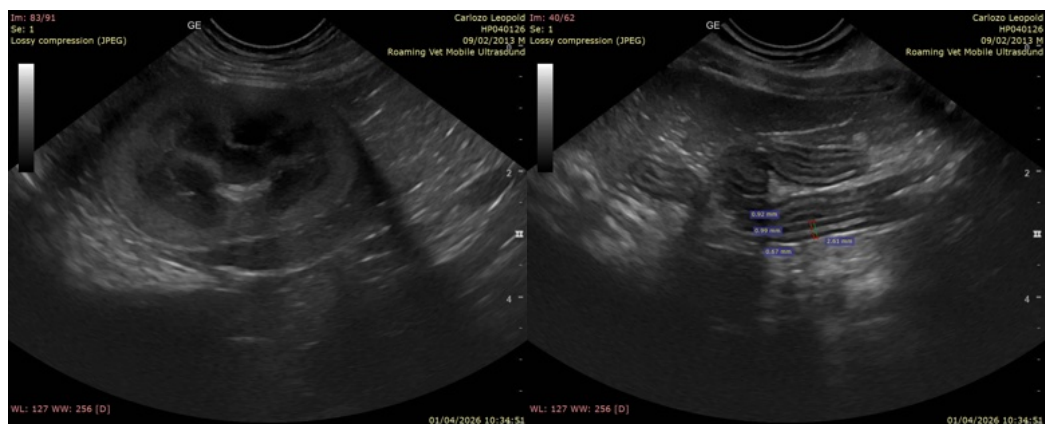
Cranial mesenteric lymph nodes are at the upper end of normal size (approximately 6 mm; typical reference  $\leq 5-6$  mm), with preserved morphology. The mild hyperechogenicity of the surrounding mesenteric fat suggests a low-grade inflammatory component. However, given the borderline size and hypochoic appearance of the nodes, an early or low-grade infiltrative process cannot be definitively excluded.

Renal cortical hyperechogenicity is noted bilaterally, with preserved architecture and normal size, consistent with mild, likely age-related renal change, of uncertain clinical significance.

### Recommendations

- Serum cobalamin and folate.
- Intestinal biopsy should be considered if clinical signs persist or progress.
- Reinforce the importance of consistent cobalamin supplementation.
- Continue/optimize strict dietary trial (ensure true exclusivity).
- Given persistent clinical signs despite diet alone, initiation of immunomodulatory therapy is reasonable
- Monitoring.

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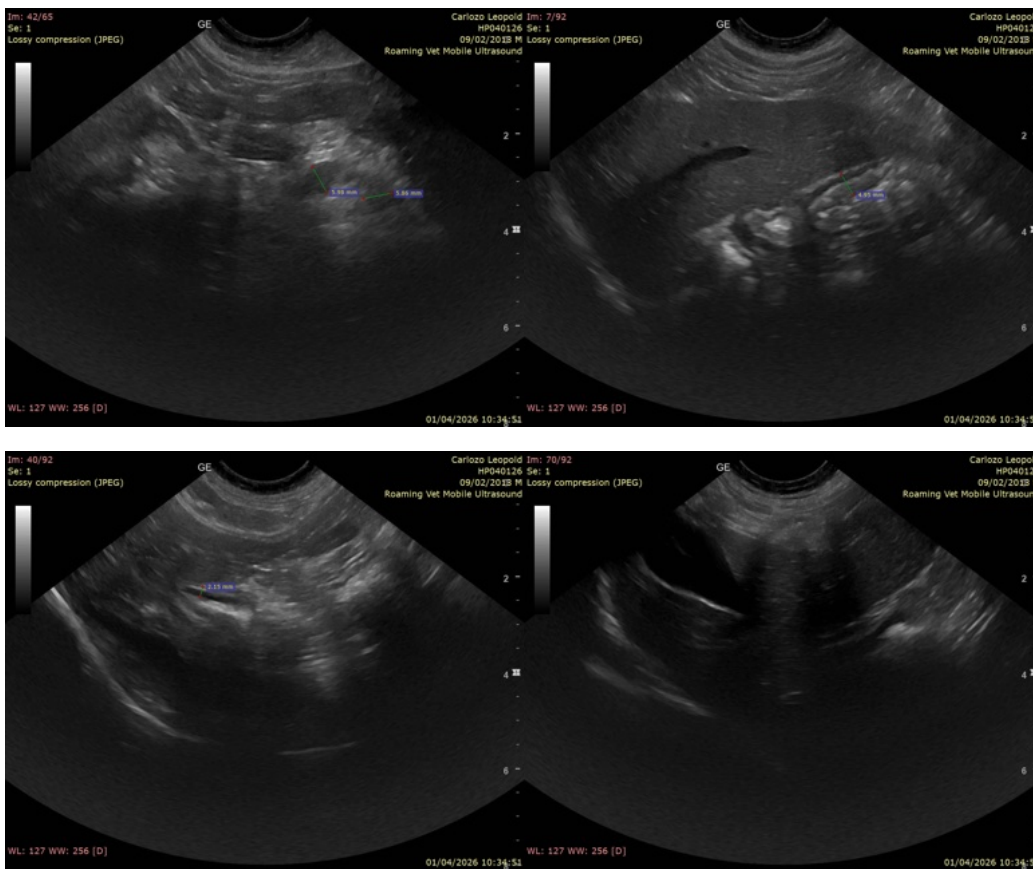
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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