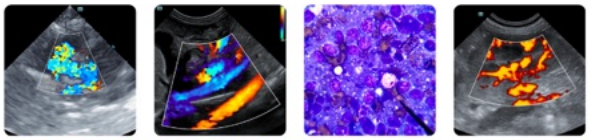


PATIENT

Zeref Crane

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Neutered male

AGE

9 years

WEIGHT

8.3 lbs

INTERPRETED BY

Dr. Alicia Angosto Guerrero

IMAGING PERFORMED BY

Grace Jayne, CVT

HOSPITAL NAME

Ark AH

REFERRING VET

Dr. Timbas

INVOICE

72153

DATE

3/3/26

PRESENTING CLINICAL SIGNS

- Stomatitis (full mouth extractions in May 2024)
- Chronic vomiting - suspected low grade pancreatitis or IBD in previous years. Hills Biome was enough to keep vomiting to a minimum. Increased vomiting noted over the last several months (3-5 times per month vs <2 which was considered normal)
- 0.5 pound weight loss over the last 1.5-2 years
- Relative eosinophilia, basophilia

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is mildly underdistended. The wall appears thin and smooth. The urine is predominantly anechoic with scant suspended echogenic debris. The bladder neck and proximal urethra have a normal ultrasonographic appearance. No uroliths or sonographic evidence of inflammatory or neoplastic changes are identified.

Left kidney: 3.06×2.00 cm. Cortical thickness measures 0.32 cm in the sagittal plane. Renal size is within normal limits for an adult cat (typical length approximately 3.0–4.5 cm). The cortex is mildly hyperechoic relative to the liver. The corticomedullary ratio and definition are preserved. At the caudal pole, the contour is mildly irregular, and two small hyperechoic cortical foci are identified. No pyelectasia, nephrolithiasis, or hydronephrosis is observed. Color Doppler demonstrates a normal vascular pattern.

Right kidney: 2.96×1.88 cm. Cortical thickness measures 0.39 cm in the sagittal plane. Renal size is within accepted reference limits for a cat. The contour is mildly irregular at the cranial pole. The cortex is mildly hyperechoic relative to the liver. Corticomedullary ratio and definition are preserved. No pyelectasia, nephrolithiasis, or hydronephrosis is identified. Color Doppler demonstrates a normal vascular pattern.

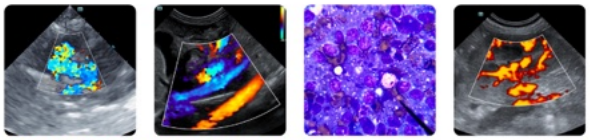
Adrenal Glands

Left adrenal gland measures 0.25 cm (cranial pole) and 0.23 cm (caudal pole) in dorsoventral dimension, within normal limits for a cat (typically <0.45 cm).

The right adrenal gland was not reliably visualized.

Spleen

Splenic thickness measures 0.82 cm, within normal limits for a cat. The parenchyma is homogeneous with normal echogenicity. The capsule is smooth and regular. No focal lesions are identified.



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Liver

The liver is subjectively normal in size with sharp margins and regular contour. The hepatic parenchyma is homogeneous and isoechoic relative to the falciform fat. No focal lesions or hepatic lymphadenopathy are identified.

The gallbladder is normally distended. The wall is thin. The contents are predominantly anechoic. No cystic duct or common bile duct dilation is observed.

Gastrointestinal

The stomach is empty and folded. Gastric wall thickness measures 1.39 mm with preserved layering (within normal feline reference range, typically <3 mm when non-distended). The pylorus measures 3.15 mm.

Duodenum: 1.88 mm (within normal feline range, typically <2.5–3.0 mm).
Jejunum: 2.61 mm total thickness. Mucosa: 0.78 mm. Submucosa: 0.50 mm. Muscularis propria: 0.40 mm Muscularis-to-mucosa ratio: 0.40/0.78 = 0.51

Ileum: 3.13 mm total thickness (upper end of normal to mildly increased; feline ileum typically ≤2.5–3.0 mm). Mucosa: 1.78 mm. Submucosa: 0.58 mm. Muscularis propria: 1.35 mm. Muscularis-to-mucosa ratio: 1.35/1.78 = 0.76

Ileocecal junction: 4.23 mm total thickness. Muscularis measures 2.11 mm.

There is a moderate intraluminal gas pattern within the small and large intestines.

Colon: Transverse colon 0.72 mm; descending colon 1.31 mm. Descending segment is empty and folded, with preserved layering.

Pancreas

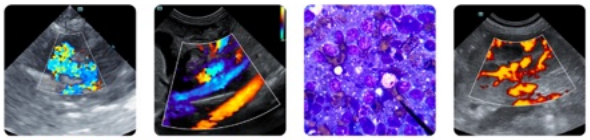
The evaluated pancreatic regions show no sonographic evidence of overt inflammation. No peripancreatic fat hyperechogenicity or focal masses are identified.

Peritoneal Cavity

No abdominal effusion, peritonitis, or lymphadenomegaly is identified in the submitted video clips. The iliac trifurcation appears normal.

ULTRASONOGRAPHIC FINDINGS

- Ileal and ileocecal mural thickening with marked muscularis enlargement (muscularis-to-mucosa ratio up to 0.76).
- Mild bilateral renal cortical hyperechogenicity with subtle contour irregularity.



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- Small hyperechoic cortical foci in the left kidney.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The ileum and ileocecal region demonstrate mural thickening with marked muscularis enlargement. The ileal muscularis measures 1.35 mm with a muscularis-to-mucosa ratio of 0.76, and the ileocecal muscularis measures 2.11 mm. In cats, disproportionate muscularis thickening—particularly affecting the ileum and ileocecal region—with preserved layering is most commonly associated with chronic enteropathy. Given the history of chronic vomiting, mild weight loss, and peripheral eosinophilia, differentials include:

- Chronic inflammatory enteropathy (lymphoplasmacytic or eosinophilic enteritis).
- Low-grade (small cell) alimentary lymphoma.

Ultrasonography alone cannot reliably differentiate IBD from small cell lymphoma due to significant overlap.

The kidneys show mild bilateral cortical hyperechogenicity and subtle contour irregularities, with small hyperechoic cortical areas in the left kidney. Renal size remains within normal limits, and corticomedullary definition is preserved. These findings are most consistent with early chronic renal change or cortical fibrosis.

No ultrasonographic evidence of pancreatitis is identified. However, published studies indicate that ultrasonography has variable and overall limited sensitivity for the detection of mild or chronic pancreatitis in cats. Therefore, pancreatitis cannot be excluded based on imaging findings alone.

Recommendations

- Comprehensive feline gastrointestinal panel, including serum cobalamin, folate, and fPLI, to further evaluate for chronic enteropathy and to assess concurrent pancreatitis.
- A definitive diagnosis distinguishing inflammatory bowel disease from small cell lymphoma requires intestinal biopsy.
- If a less invasive approach is preferred, a stepwise medical trial may be considered, including a dietary trial with a hydrolyzed or novel protein diet, cobalamin supplementation if hypocobalaminemia is identified, and clinical as well as ultrasonographic monitoring. The use of immunosuppressive therapy (prednisolone) may be considered at the discretion of the attending clinician.
- Correlate renal findings with urinalysis, urine specific gravity, and renal parameters.

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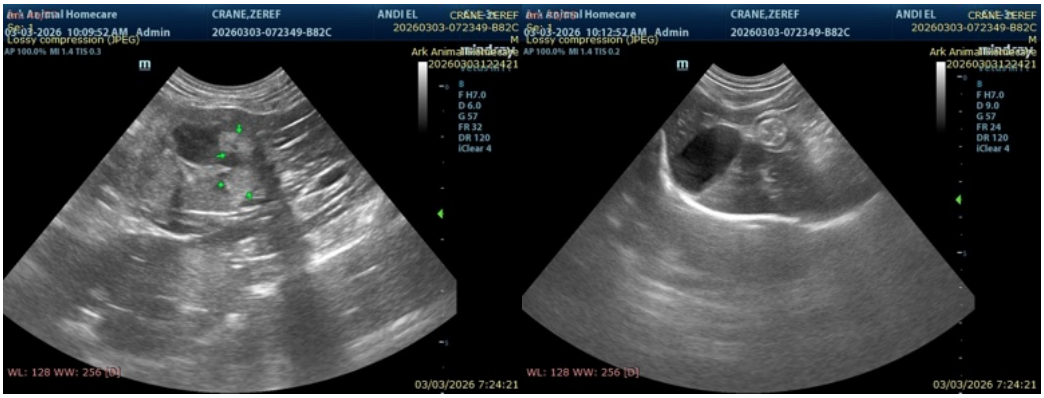

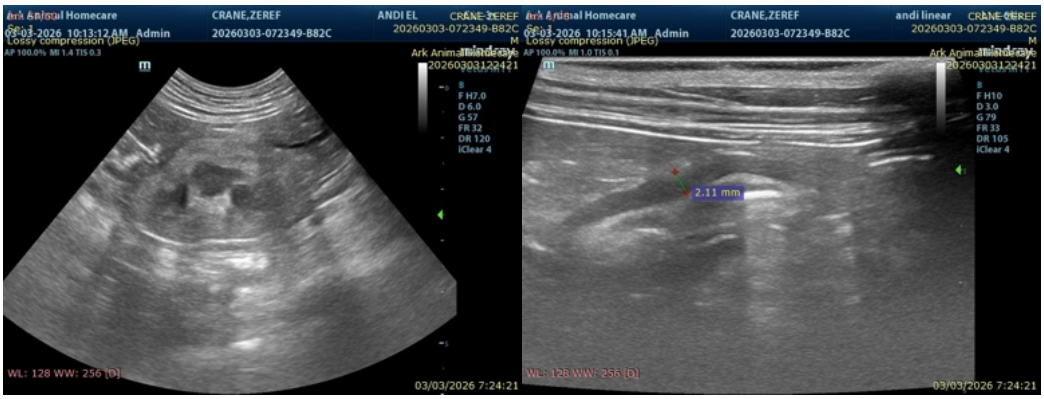

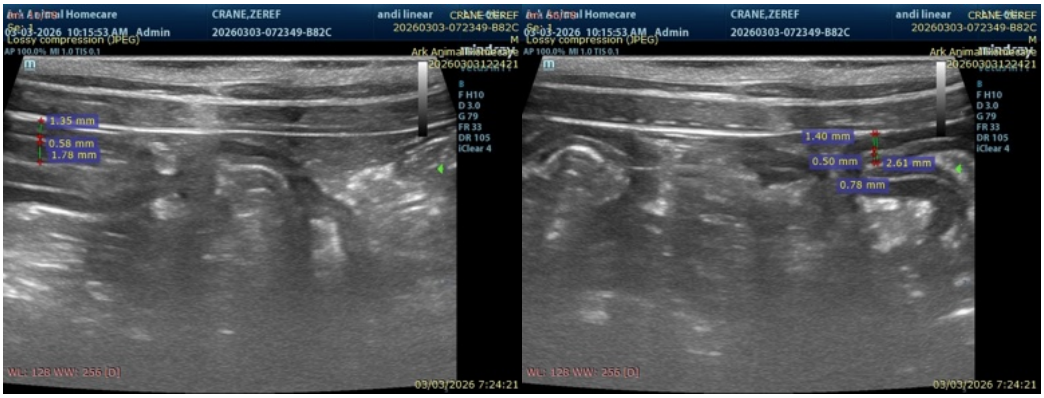

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

MV Esp Ultrasound in Domestic and Wild Animals

info@SonoPath.com