



## PATIENT

Cassie Croso

## SPECIES

Feline

## BREED

Domestic Shorthair

## SEX

Spayed female

## AGE

12 years

## WEIGHT

5.17 kgs

## INTERPRETED BY

Dr. Alicia Angosto  
Guerrero

## IMAGING PERFORMED BY

Patrick Hennigan DVM

## HOSPITAL NAME

Mattydale AH

## REFERRING VET

Dr. Hennigan

## INVOICE

72046

## DATE

2/27/26

## PRESENTING CLINICAL SIGNS

- Lost 12 ounces since August 2025.
- Chronic skin alopecia with pyodermas
- December 2025 bloodwork revealed an elevated ALP and ALT
- Per owner patient is eating and drinking normally with good activity.
- CBC-wnl/Chem-ALP (149), ALT (410)/TT4 - 2.2

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

The bladder lumen is normally distended, and the wall of the urinary bladder appears thin and smooth. The urine is turbid with abundant suspended sediment. Normal appearance of the bladder neck and proximal urethra. There are no calculi and no evidence of inflammatory or neoplastic changes.

The left kidney is normal in shape and size: 4.23 × 2.35 cm, and the thickness of the cortex is 0.35 cm in the sagittal plane. The cortex is hyperechoic compared to the liver parenchyma. A 2.45×2.12 mm cortical cyst is present. The corticomedullary ratio is normal and corticomedullary definition is preserved. There is no evidence of pyelectasia, nephroliths, or hydronephrosis. Doppler color shows a normal vascular pattern.

The right kidney is normal in shape and size: 4.06 × 2.33 cm, and the thickness of the cortex is 0.40 cm in the sagittal plane. The cortex is hyperechoic compared to the liver parenchyma. The corticomedullary ratio is normal and corticomedullary definition is preserved. There is no evidence of pyelectasia, nephroliths, or hydronephrosis. Doppler color shows a normal vascular pattern.

Overall, the renal cortices are diffusely increased in echogenicity, resulting in increased corticomedullary distinction.

### *Adrenal Glands*

Dorsoventral diameters measured in the sagittal plane: The left adrenal gland measures 0.35 cm at the cranial pole and 0.32 cm at the caudal pole. The right adrenal gland was not reliably visualized.

### *Spleen*

Splenic thickness is 0.98 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 appears uniform and isoechoic compared to the falciform fat, with a normal echotexture. No hepatic lymphadenopathy is observed.



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The gallbladder measures  $3.60 \times 1.30 \times 1.37$  cm, with an estimated volume of 3.35 mL (within normal fasting limits, generally  $\leq 4$ –5 mL). The wall is thin. The contents contain a mild to moderate amount of biliary sludge. The common bile duct measures 2.81–2.35–1.83 mm from proximal to distal.

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### *Gastrointestinal*

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The stomach is empty and folded, with mural thickness (1.71 mm) and preserved wall layering. The pylorus measures 2.87 mm. Duodenum: 2.02 mm. Jejunum: 2.09 mm, Mucosa: 0.91 mm, Submucosa: 0.54 mm, Muscularis propria: 0.32 mm. Ileum: 2.07 mm, Mucosa: 0.79 mm, Submucosa: 0.75 mm, Muscularis propria: 0.66 mm, with preserved wall layering. The ileocecal junction measures 3 mm, with a muscularis thickness of 0.84 mm. No signs of inflammation, ileus, or foreign material are identified.

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Colon: 0.53 mm, with formed feces in the descending segment.

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### *Pancreas*

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Pancreatic thickness measures 4.59–5.69 mm. The pancreatic parenchyma is isoechoic to the adjacent omental fat. The pancreatic duct measures 1.29 mm in diameter. No sonographic evidence of active inflammation or focal mass is identified.

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### *Peritoneal Cavity*

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

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## ULTRASONOGRAPHIC FINDINGS

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- Mild to moderate biliary sludge with normal gallbladder volume.
- Diffuse bilateral renal cortical hyperechogenicity with preserved architecture
- Small left renal cortical cyst.
- Turbid urine with abundant suspended sediment.

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## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

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The hepatic parenchyma appears sonographically unremarkable, with normal echogenicity and architecture. In the context of increased hepatocellular enzymes, it should be noted that biochemical abnormalities may precede detectable ultrasonographic changes. Early inflammatory hepatopathy (lymphocytic cholangitis/cholangiohepatitis), reactive hepatopathy, or metabolic hepatocellular stress can occur in the absence of overt sonographic parenchymal remodeling.

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The presence of mild to moderate biliary sludge with common bile duct measurements within accepted feline limits is most consistent with biliary stasis. In clinically stable cats, this finding is often incidental and may be associated with fasting status, reduced gallbladder motility, or mild reactive hepatobiliary



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change. In the context of elevated ALT and ALP, it may reflect early inflammatory hepatobiliary disease (lymphocytic cholangitis) without ultrasonographic evidence of obstruction.

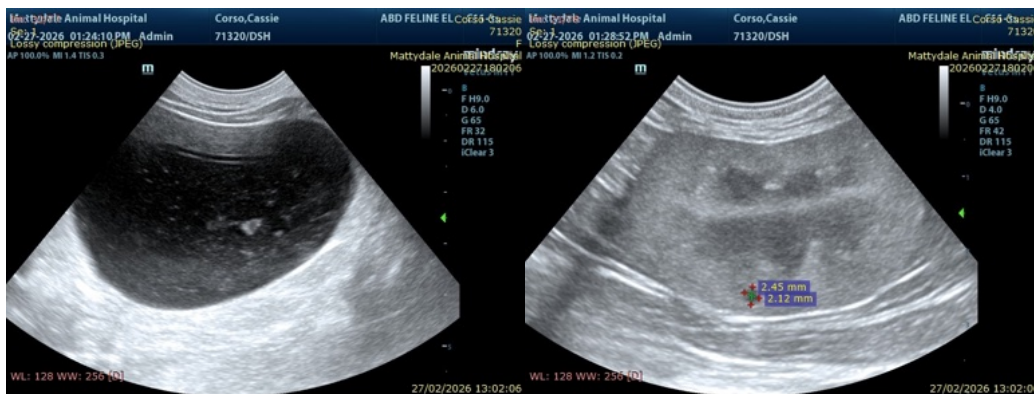
The pancreas appears normal in echogenicity and thickness; however, the pancreatic duct measures 1.29 mm, which is mildly prominent for a cat. In older cats, mild ductal dilation can be age-related or associated with subclinical chronic pancreatitis.

Renal cortical hyperechogenicity with preserved corticomedullary architecture in a geriatric cat is most commonly associated with chronic degenerative or early chronic kidney changes. Correlation with renal biochemistry and urinalysis is recommended.

### Recommendations

- Urinalysis with sediment exam and urine culture given abundant suspended debris.
- Correlation with renal laboratory parameters (creatinine, SDMA, urinalysis ± UPC) is recommended to determine the clinical significance of the increased cortical echogenicity.
- Repeat serum biochemistry to confirm persistence and trend of ALT elevation if not recently performed.
- If ALT remains persistently elevated, initiation of hepatoprotective therapy may be considered.
- Re-evaluate liver enzymes in 4–8 weeks to assess response and progression. If enzyme elevations persist or worsen despite supportive management, further hepatobiliary diagnostics (fasting bile acids, additional imaging, or sampling) may be warranted.

Final therapeutic decisions should be based on the attending veterinarian's clinical assessment and overall case management.





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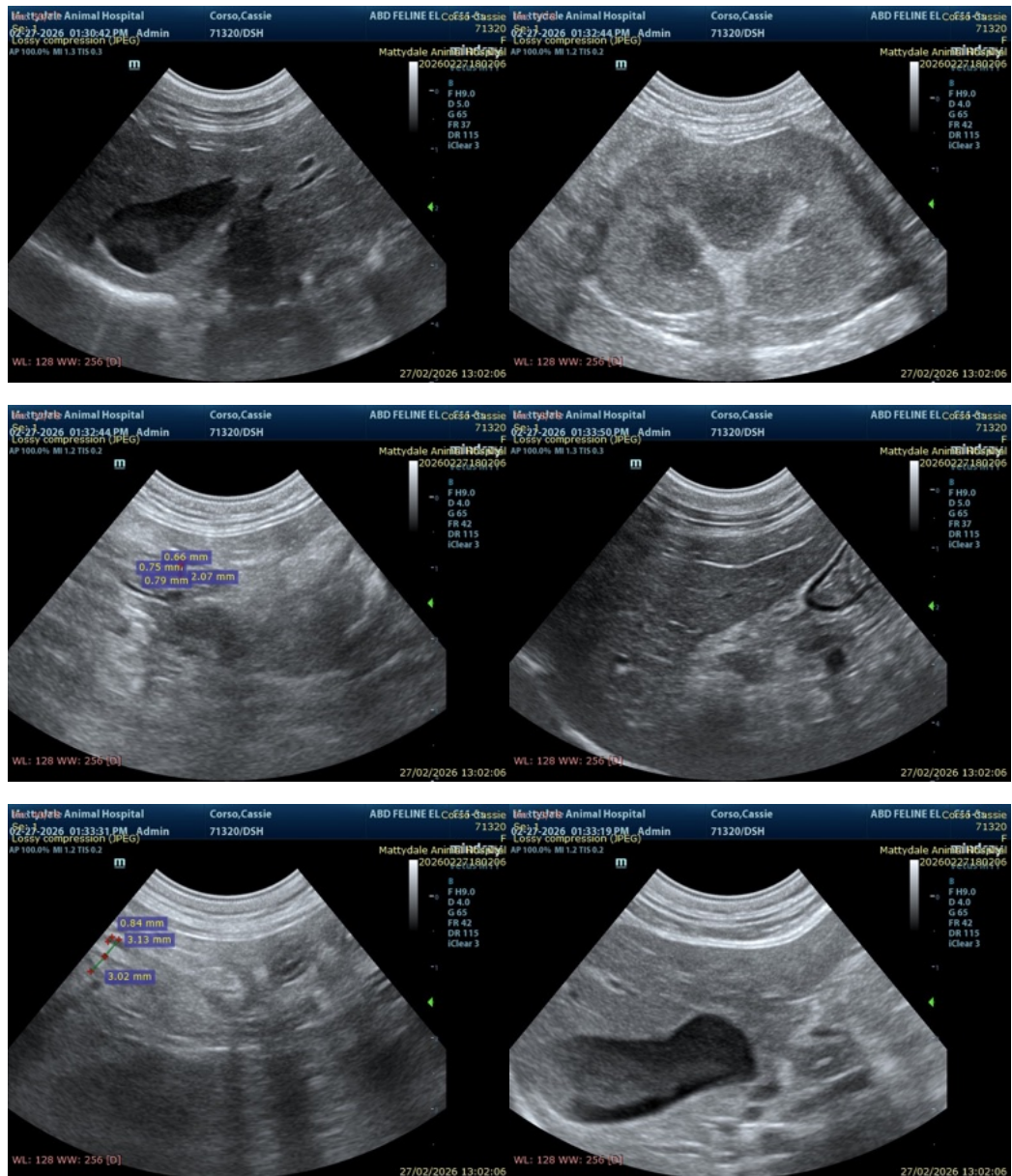
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

MV Esp Ultrasound in Domestic and Wild Animals

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