



PATIENT

Penelope Burns

SPECIES

Canine

BREED

Mixed Breed (Boxer X)

SEX

Female Spayed

AGE

9 yrs 3 mos 3 wks

WEIGHT

20.2 kgs

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)

IMAGING PERFORMED BY

Dr. Jill Rankin

HOSPITAL NAME

Calgary Family Vet

REFERRING VET

Dr. Yolanda Lopez

INVOICE

12876

DATE

12/3/25

PRESENTING CLINICAL SIGNS

History: 10-year-old spayed female dog presenting for an abdominal ultrasound to investigate asymptomatic, mildly elevated liver enzymes and a chronic history of gastrointestinal signs. The primary concern is the elevation in liver enzymes. As of November 14th, the patient's ALT was 388 and ALP was 269. Despite these findings, the dog is not showing any clinical symptoms related to liver disease. A recent bile acids test was performed, and the results were within normal limits, indicating preserved liver function. The patient has a lifelong history of intermittent gastrointestinal issues, characterized by episodes of anorexia lasting a few days, followed by vomiting. The owner notes uncertainty whether these chronic gut-related signs are connected to the liver enzyme elevations.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment, mineral or calculi. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

Normal size and margination was present in the kidneys. A normal 1:3 cortex / medulla ratio and normal corticomedullary definition were maintained. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pelvic dilation. The left kidney measured 6.1 cm in length. The right kidney measured 5.5 cm in length.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.62 cm width at the caudal pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.57 cm width at the caudal pole.

Spleen

The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

Liver

The liver presented subjective borderline mild hepatomegaly with normal vascular volume. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion. Solitary visualized, discrete, hypoechoic left liver nodule was present measuring 1.8 cm in diameter. The gallbladder was non distended in size with mild, non-organized, non-dependent, echogenic, nonmineralized biliary sludge. The cystic duct and common bile ducts were normal without evidence of dilation.



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Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material.

Normal visible colon wall layers were present with apparent formed feces in lumen.

Pancreas

The parenchyma of the left limb, body and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease was evident.

Free Abdomen

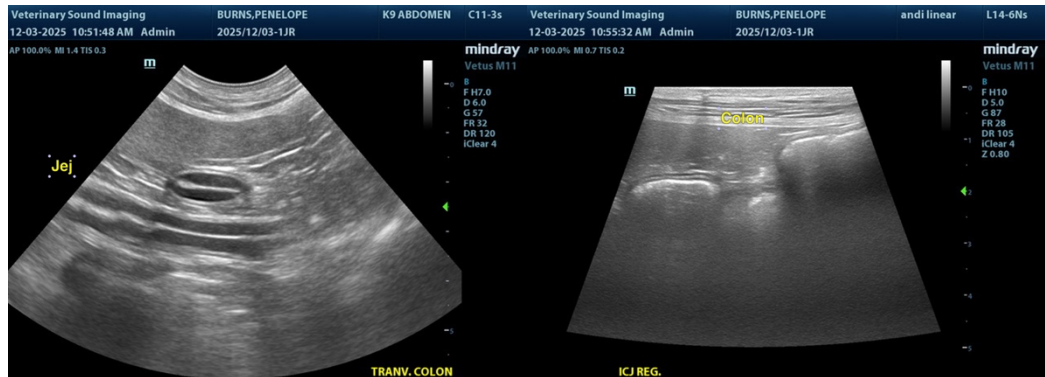
No overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

- Hepatopathy with discrete intraparenchymal nodule
- Non-organized gallbladder debris (non-mucocele)
- Sonographically normal gastrointestinal tract

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The hepatopathy and discrete liver nodule are nonspecific with considerations including vacuolar hepatopathy, inflammatory/immune/infectious disease, discrete nodular hyperplasia, hematopoiesis, toxic hepatopathy, i.e. copper, non-obstructive cholestasis or other with neoplasia thought less likely. Further assessment may include hepatic parenchyma and if accessible, discrete nodular FNA cytology. Hepato-supportive medications given patient is non-clinical with sonographic monitoring of the liver nodule for evidence of progression would be reasonable. Hepatic biopsy required for definitive diagnosis. A GI panel to include PLI/TLI/Cobalamin/Folate is recommended.





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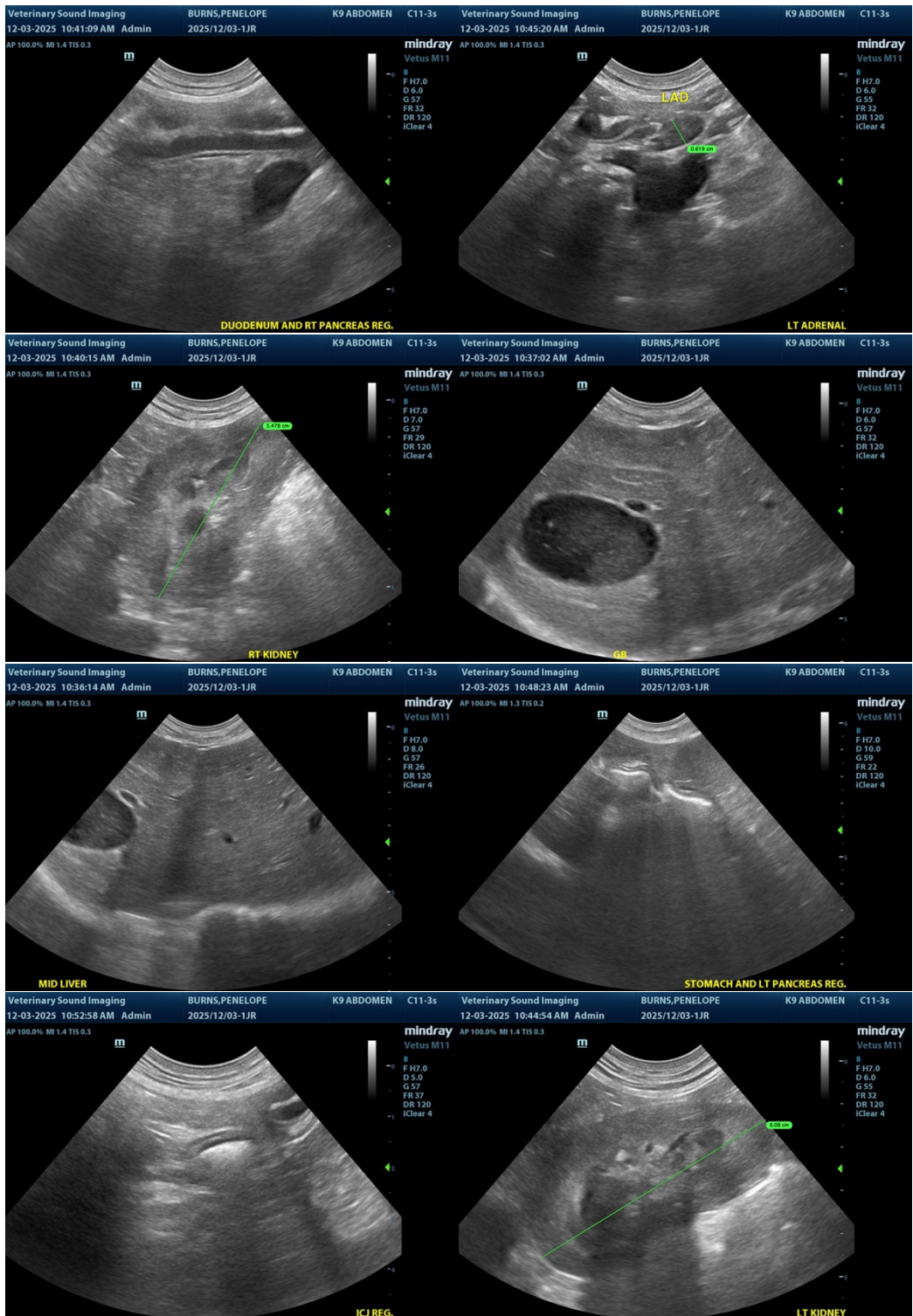
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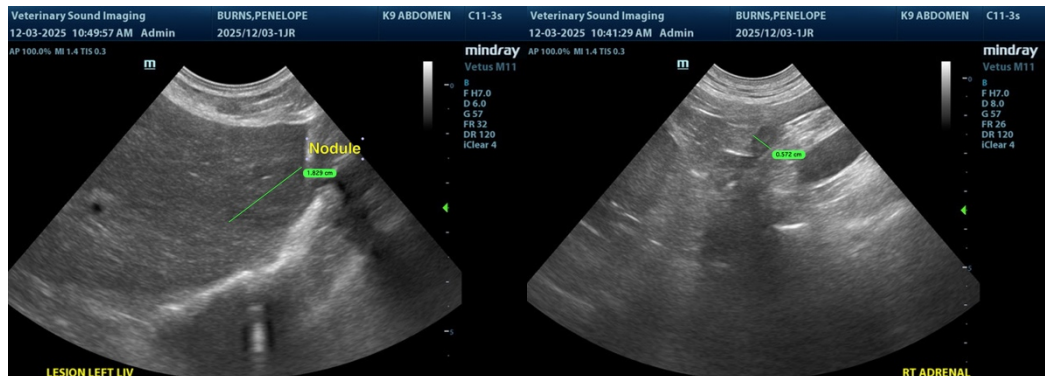
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

info@sonopath.com