



PATIENT

Milo Remi

SPECIES

Canine

BREED

Havanese

SEX

MN

AGE

12yr

WEIGHT

8.3kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr Jill Rankin

HOSPITAL NAME

Airdrie Animal Health
Centre

REFERRING VET

Dr Jeremy

INVOICE

24280

DATE

03/23/2026

PRESENTING CLINICAL SIGNS

- Presented for senior exam and blood work. History of elevated liver enzymes. Below are the blood values.
- CBC - plts 654 (120-412)
- CHEM - ALT 344 (18-121)
 - AST 94 (16-55)
 - ALKP - was not able to read
 - GGT >1200 (0-13)
- These values in 2024 were 173, 42, 2393 and 805 respectively. Bile Acids in 2024 were WNL
- Spec Cpli - WNL
- TT4 - 21.1 (13-53) - normal but values have dropped despite therapy and no notable weight change. Last check March 2025 was 42.5.
- UA - USG 1.024, ph 8.5, 2 protein, remainder WNL
- Hoping the ultrasound will give us insight into the liver/gallbladder.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no evidence of urine/lumen sediment, mineral, or calculi. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. Bilateral areas of mild medullary mineral were present. Intermittent small cortical cysts were present. The left kidney measured 4.7 cm in length. The right kidney measured 4.8 cm in length.

The area of the aortic trifurcation was free of pathology.

The residual prostate appeared normal and free of pathology.

Adrenal Glands

The adrenal glands were mildly enlarged exhibiting intact mildly asymmetrical capsule contour and mild non-homogenous non-mineralized parenchyma. The left adrenal gland measured 0.67 cm width at the caudal pole The right adrenal gland measured 0.72 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/Gallbladder



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The liver presented mildly enlarged in size. Normal to lobar mild increased non-homogenous parenchyma. No visualized masses or nodules were present. Normal vascular volume. 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.

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The gallbladder was non-distended in size with thin walls and mild congealed non-organized primarily caudal lumen and gallbladder neck debris. The cystic and common bile ducts were normal.

Gastrointestinal

BREED

Havanese

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 mechanical/metabolic ileus, obstruction or foreign material.

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

Pancreas

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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

WEIGHT

8.3kg

No omental masses, overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

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Primary

- Hepatopathy
- Bilateral asymmetrical adrenomegaly
- Congealed non-organized gallbladder debris - not consistent with mature mucocele
- Normal gastrointestinal tract / pancreas
- Mild chronic renal changes

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

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Adrenal workup with LDDST is warranted if clinical signs consistent with Cushing syndrome and in conjunction with thrombocytopenia.

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Overall, the liver is most suggestive of benign criteria with occult hepatic neoplasia thought less likely. Pending adrenal testing if elected and assuming normal clotting status, hepatic sampling with initial FNA cytology could be considered for further assessment.

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Hepatosupportive medications including Denamarin and ursodiol may prove beneficial with sonographic monitoring of the liver and gallbladder if evidence of progressive hepatopathy or cholestasis.

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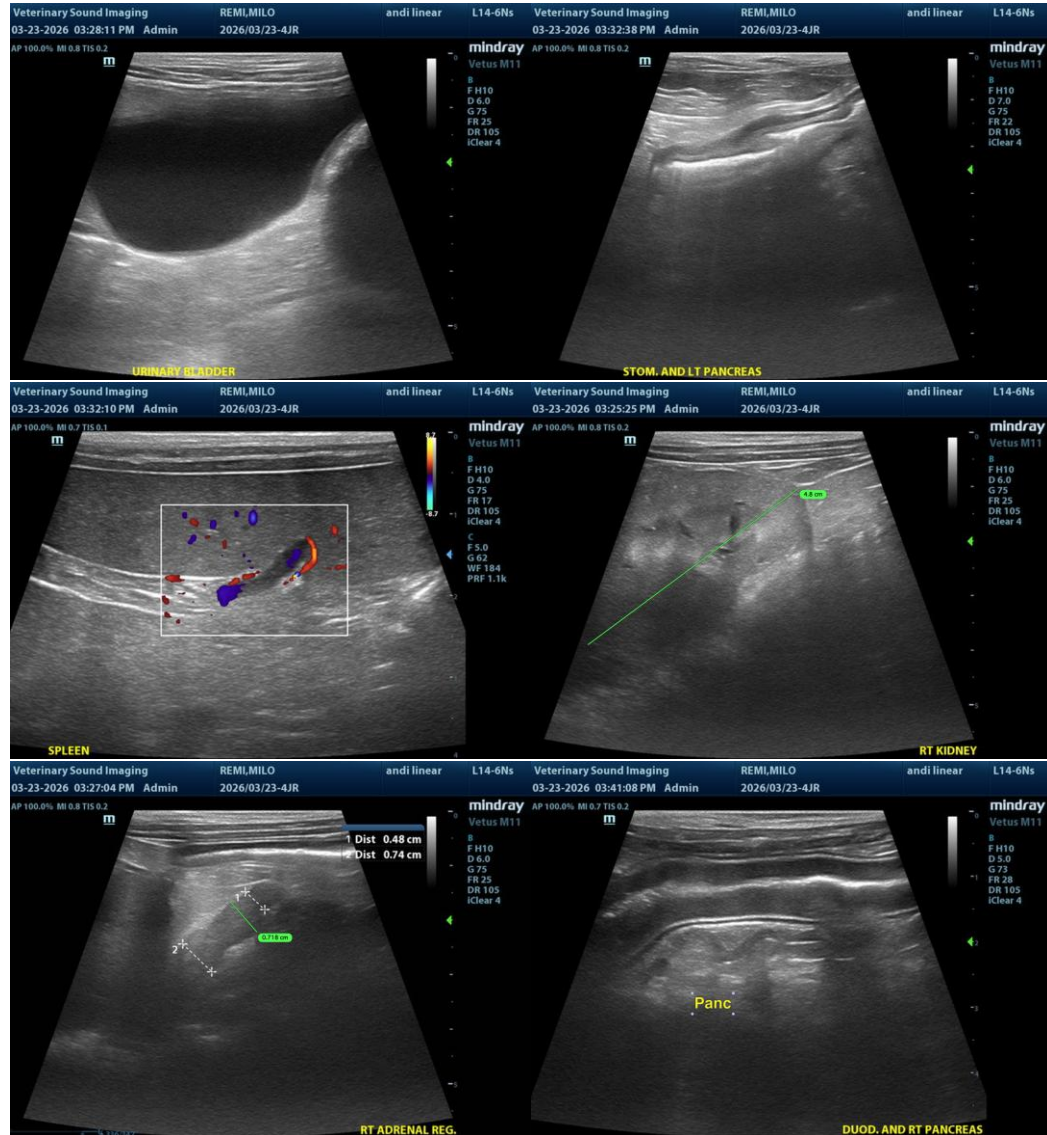
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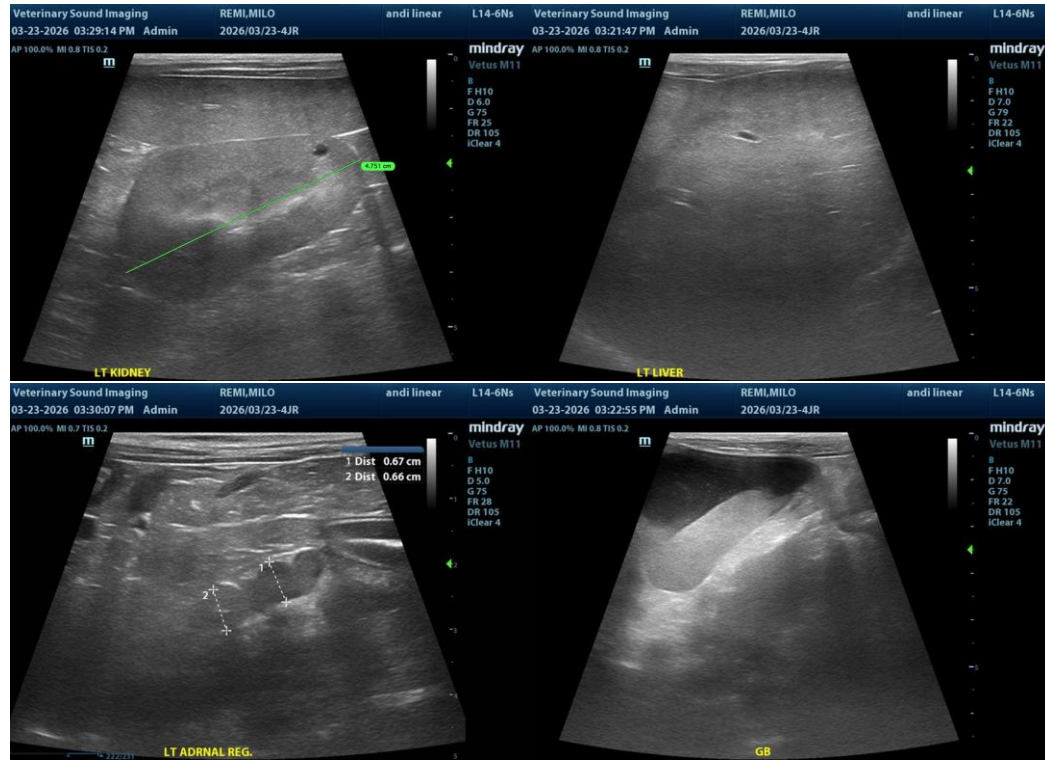
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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info@sonopath.com