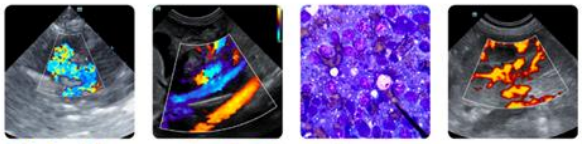


PATIENT

Linus Middleton

SPECIES

Canine

BREED

Mixed

SEX

MN

AGE

10yr

WEIGHT

12lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr Mack E

HOSPITAL NAME

Northside Veterinary Clinic

REFERRING VET

Dr Michelle Mack

INVOICE
24539

DATE
04/20/2026

PRESENTING CLINICAL SIGNS

Patient has not been acting themselves per owner. Patient is also experiencing some anorexia.

Abnormal PE/Chem/CBC/UA Results: - ALT elevated at 654 but the ALP was within normal limits
- U/A was unremarkable

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. No evidence of renal calculi. The left kidney measured 4.0 cm in length. The right kidney measured 3.9 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 left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.37 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 0.52 cm width at the caudal pole.

Spleen

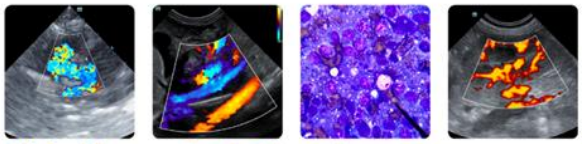
The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute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

Liver/Gallbladder

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. Subjective adequate vascular volume. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with thin walls and mild non-organized debris. The cystic and common bile ducts were normal.

Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained moderate variably echogenic non-shadowing ingesta sonographically suggestive of food echogenicity with no signs of obstruction or foreign material.



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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.

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 omental masses, overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

Primary

- Hepatopathy with adequate vascular volume
- Mild non-organized gallbladder debris
- Normal gastrointestinal tract with non-shadowing gastric ingesta
- Normal area of the pancreas
- Age related renal changes, normal bilateral adrenal glands

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Although non-specific, the hepatopathy suggests benign criteria with non-specific inflammatory or infectious disease favored given ALT elevation. No evidence of intra-hepatic or extra-hepatic macroscopic shunt. Further assessment may include assuming normal clotting status, hepatic FNA cytology, leptospirosis titer / PCR, and if evidence of hepatic dysfunction, bile acid profile. Hepatic biopsies with histopathology and copper assessment likely required for definitive diagnosis.

Assuming NPO, the presence of gastrointestinal ingesta may suggest some degree of metabolic or non-obstructive gastric ileus. Documented 12-hour fast and monitoring of gastric emptying may be considered. Hepatic and gastrointestinal support with consideration for empirical cholangiohepatitis protocol and sonographic reassessment if progressive hepatopathy or gastrointestinal signs is recommended.

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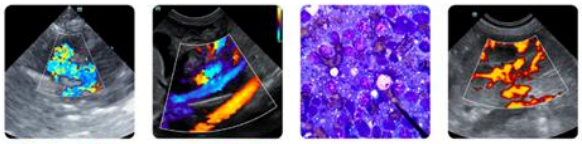

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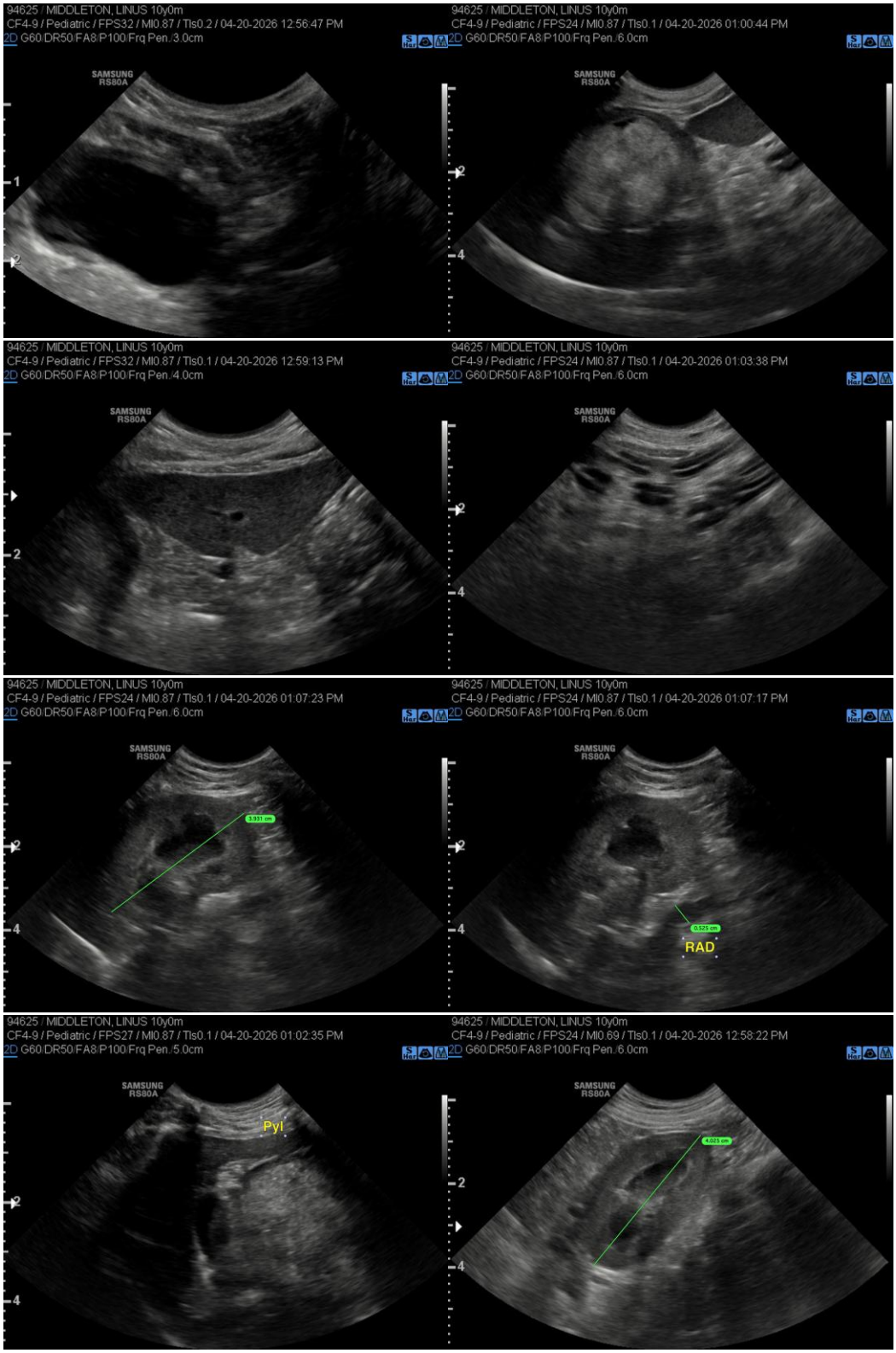

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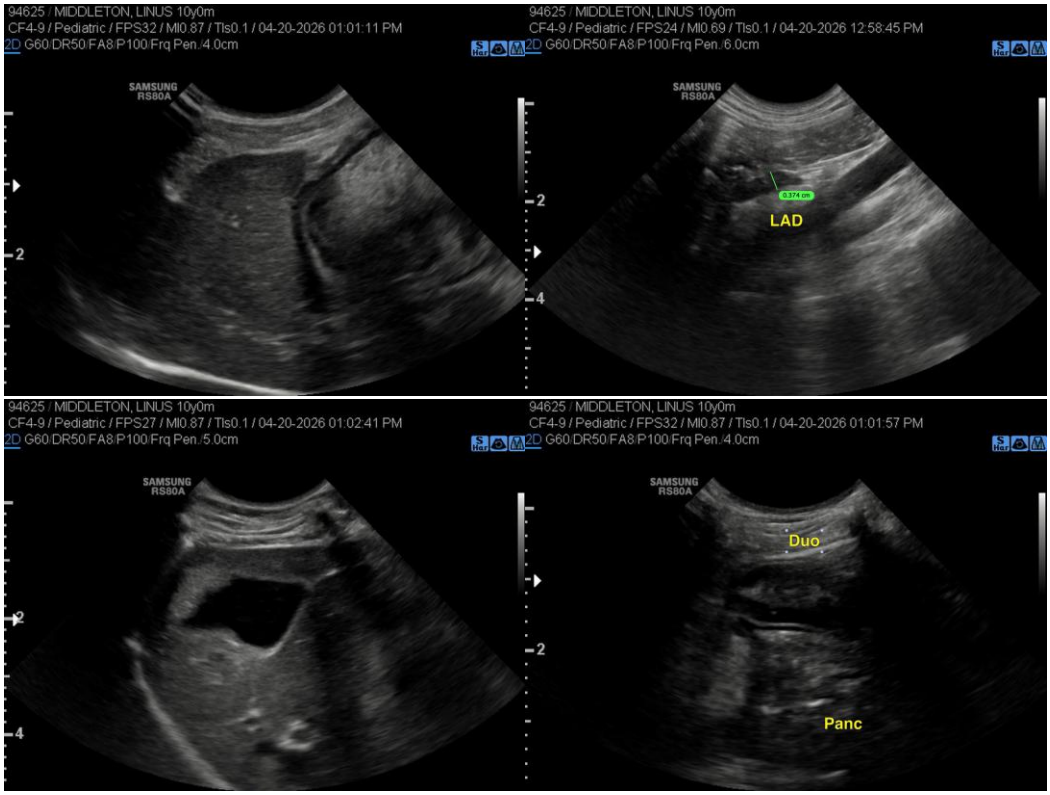

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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