



PATIENT

Maggie Frohnappfel

SPECIES

Canine

BREED

GoldenDoodle

SEX

FS

AGE

11yr

WEIGHT

29.5kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Renee Trionfetti, VMD

HOSPITAL NAME

Cypress Veterinary
Clinic

REFERRING VET

Laura Johnson, VMD

INVOICE

24187

DATE

03/13/2023

PRESENTING CLINICAL SIGNS

- AUS to further evaluate chronic progressive elevated liver enzymes (ALP). Patient has an increased ALP at 215, which was found on annual bloodwork. Upon recheck bloodwork 30 days after starting denamarin, ALP was increased to 385. Patient was recently taken off Apoquel(as of 3/10/26).
- Unrelated but good to note: Does have a history of a Left sided CCL tear after the elevated liver enzyme was found. Also, historical enucleation of left eye and currently treating the patients 3rd eyelid being up in her right eye.
- No cough, sneeze, vomiting, diarrhea, pu/pd reported.
- Meds: Denamarin, Ofloxacin Ophthalmic drops, Gabapentin 400mg q12h, Inconsistent use of optixcare eye lube
- Abnormal PE/Chem/CBC/UA Results: March 2026: - CBC: Hct 46.6%, plts 336-n - Chem: SDMA 14 (0-14), Cr 1.2-n, BUN 15-n, Alb 3.9-n, ALT 93-n, AST 25-n, ALP 385 H (5-160), prev 215 H Feb 2026: - UA: USG 1.056, Pro 1+, remainder NSF - UPC: 0.1- non-proteinuric - TT4: 0.6 L

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with mild non-dependent particulate sediment. 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. The left kidney measured 6.5 cm in length. The right kidney measured 6.6 cm in length.

The area of the aortic trifurcation was 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 0.71 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 0.48 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 mildly enlarged. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild to benign



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parenchymal remodeling. Normal 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.

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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.

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The small intestine presented intact wall layering with non-thickened wall. Subjective propensity for mildly prominent segmental intestinal muscularis and mildly prominent hyperechoic submucosal layers.

Normal visible colon wall layers were present. The colon contained soft and non-formed fecal matter in the proximal colon with semi formed fecal matter in the transverse and descending colon.

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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.

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Free Abdomen

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

WEIGHT

29.5kg

ULTRASONOGRAPHIC FINDINGS

Primary

- Benign hepatopathy pattern with mild parenchymal remodeling
- Non-organized gallbladder debris (non-mucocele)
- Age related renal changes
- Normal bilateral adrenal glands
-

Secondary

- Segmental mildly prominent small intestine muscularis / submucosal layers, variably formed fecal matter in colon

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The benign hepatopathy pattern may suggest idiopathic, vacuolar, or cholestatic hepatopathy in conjunction with mild to progressive ALP elevation, potential for chronic to low grade hepatic or hepatobiliary inflammation is thought less likely without evidence of neoplastic criteria.

No sonographic evidence of adrenal pathology as a contributing factor. Given that patient is non-clinical, hepatosupportive medications including Denamarin and ursodiol if tolerated with monitoring would be reasonable.

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The small intestine exhibited subtle mural changes, which are non-specific with potential patient variant given no reported gastrointestinal signs. Monitoring for gastrointestinal signs going forward, given variably formed fecal matter and potential sonographic reassessment of the gastrointestinal tract if clinically indicated is recommended.



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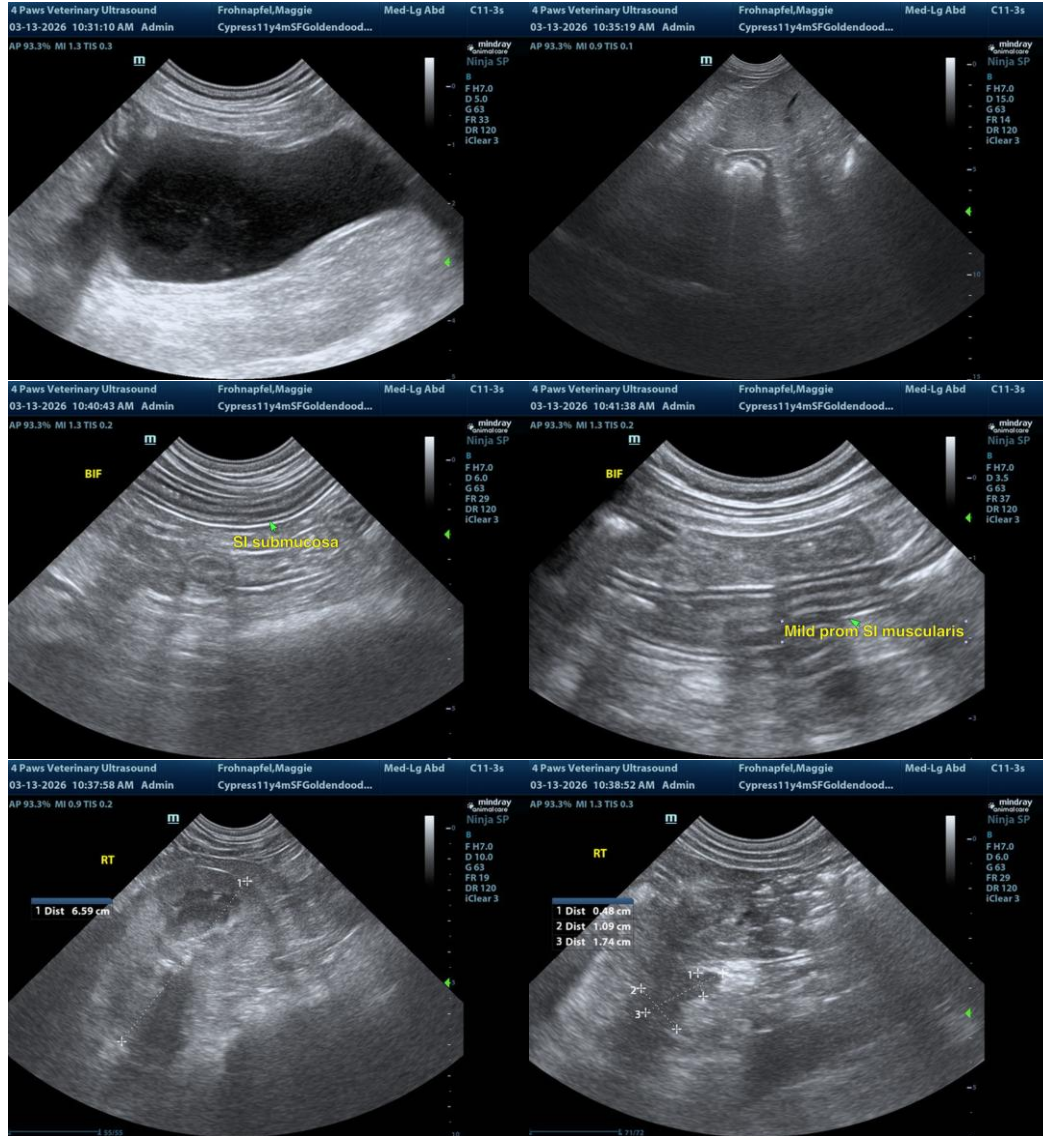
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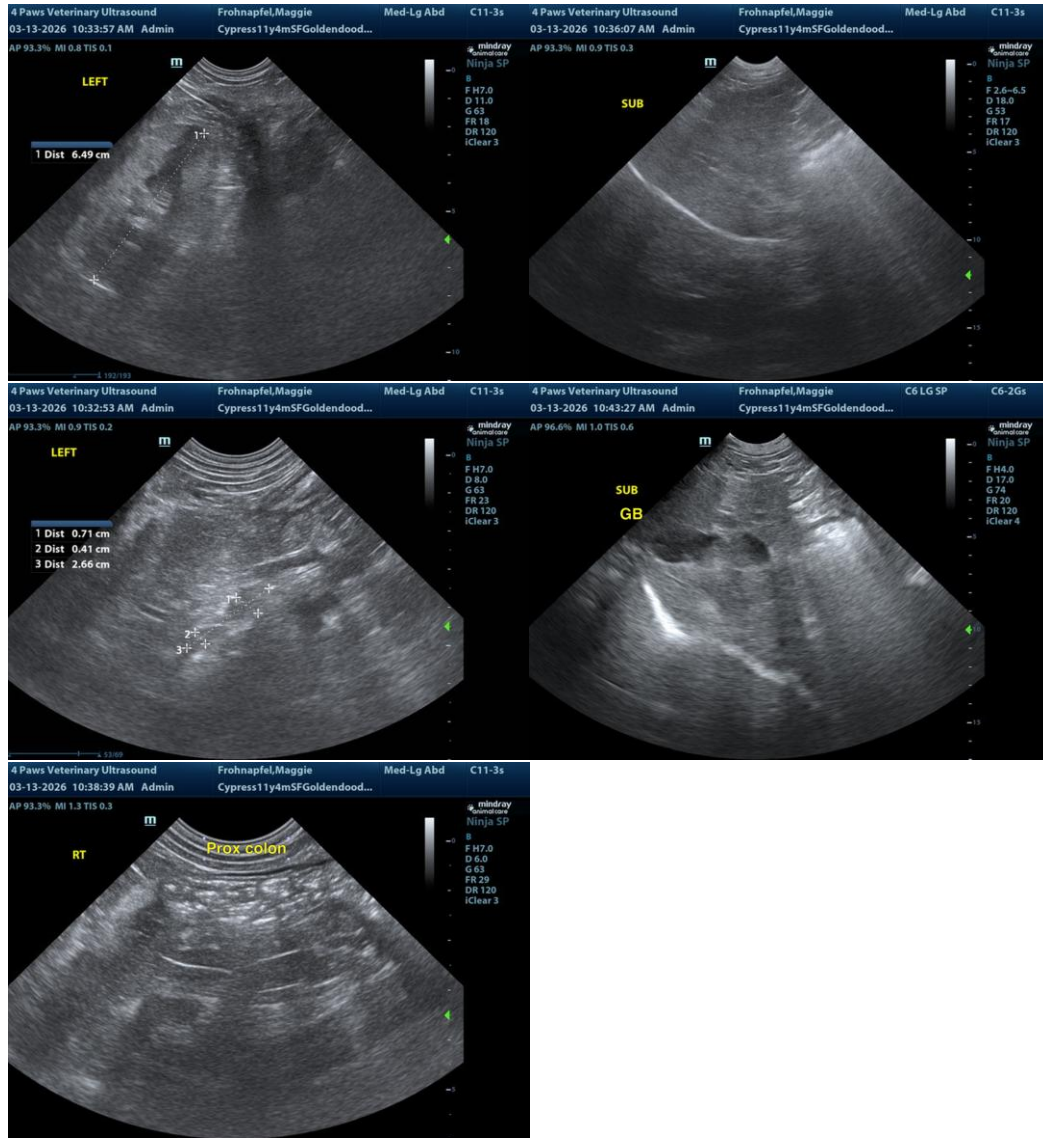
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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