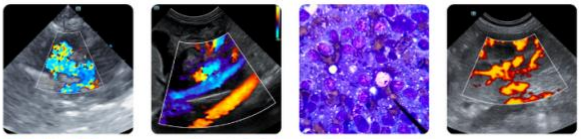

PATIENT

Ranger Farina

SPECIES

Canine

BREED

Pomeranian

SEX

Neutered Male

AGE

7 Years

WEIGHT

4.3

INTERPRETED BY

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

IMAGING PERFORMED BY

Marco Litchfield

HOSPITAL NAME

Sova Animal Hospital

REFERRING VET

Dr. Dodson

INVOICE

15196

DATE

04/17/26

PRESENTING CLINICAL SIGNS

Pet having a history of thinning hair and cough had a bile acid done.

Abnormal PE/Chem/CBC/UA Results: AST 166, ALT 275, ALKP 168, Creat 0.3mg/dl. Bile acids Pre 7.2, and post 118.4

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder was nondistended in size with normal tone. The trigone, cystourethral junction, and visible pelvic urethra exhibited normal thickness and tone. Anechoic urine was present in the lumen with no urine mineral or calculi. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic change 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 2.5 cm in length. The right kidney measured 2.9 cm in length. No evidence of renal calculi or renomegaly.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.31 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 0.44 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 portal vein and portal hilus was not definitively visualized.

The gallbladder was non distended in size with minor nonorganized nondependent biliary sludge. The cystic duct and common bile ducts were normal without evidence of dilation.

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.

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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.

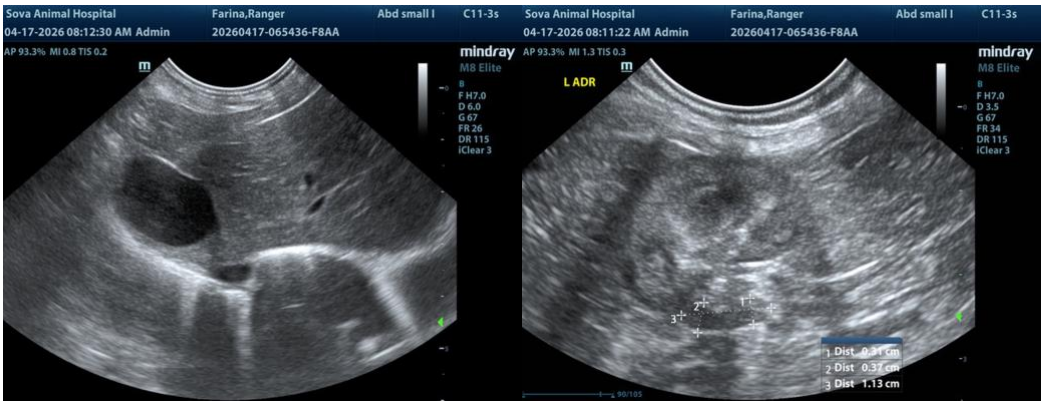
ULTRASONOGRAPHIC FINDINGS

- Hepatopathy exhibiting subjective adequate vascular volume.
- Minor gallbladder debris.
- Sonographically normal kidneys and urinary bladder- no evidence of renal or urinary bladder calculi.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Definitive evidence of an intrahepatic or extrahepatic macroscopic shunt was not obvious given subjective adequate hepatic vascular volume and lack of urinary tract calculi. Nonspecific subjective benign primary hepatic parenchymal disease with potential for portal hypoplasia or microvascular dysplasia is favored. No evidence of adrenal pathology as a contributing factor.

Further assessment may include (assuming normal clotting status and using a 25-gauge needle) hepatic FNA cytology to assess for evidence of inflammation while hepatic biopsy for histopathology is likely required for a definitive diagnosis. Monitoring of albumin, glucose, BUN and cholesterol levels is suggested. If clinical signs are suggestive of hepatic dysfunction, monitoring or recheck of bile acids is indicated. If persistent elevated postprandial bile acids greater than 80, gold standard CT with contrast is recommended.



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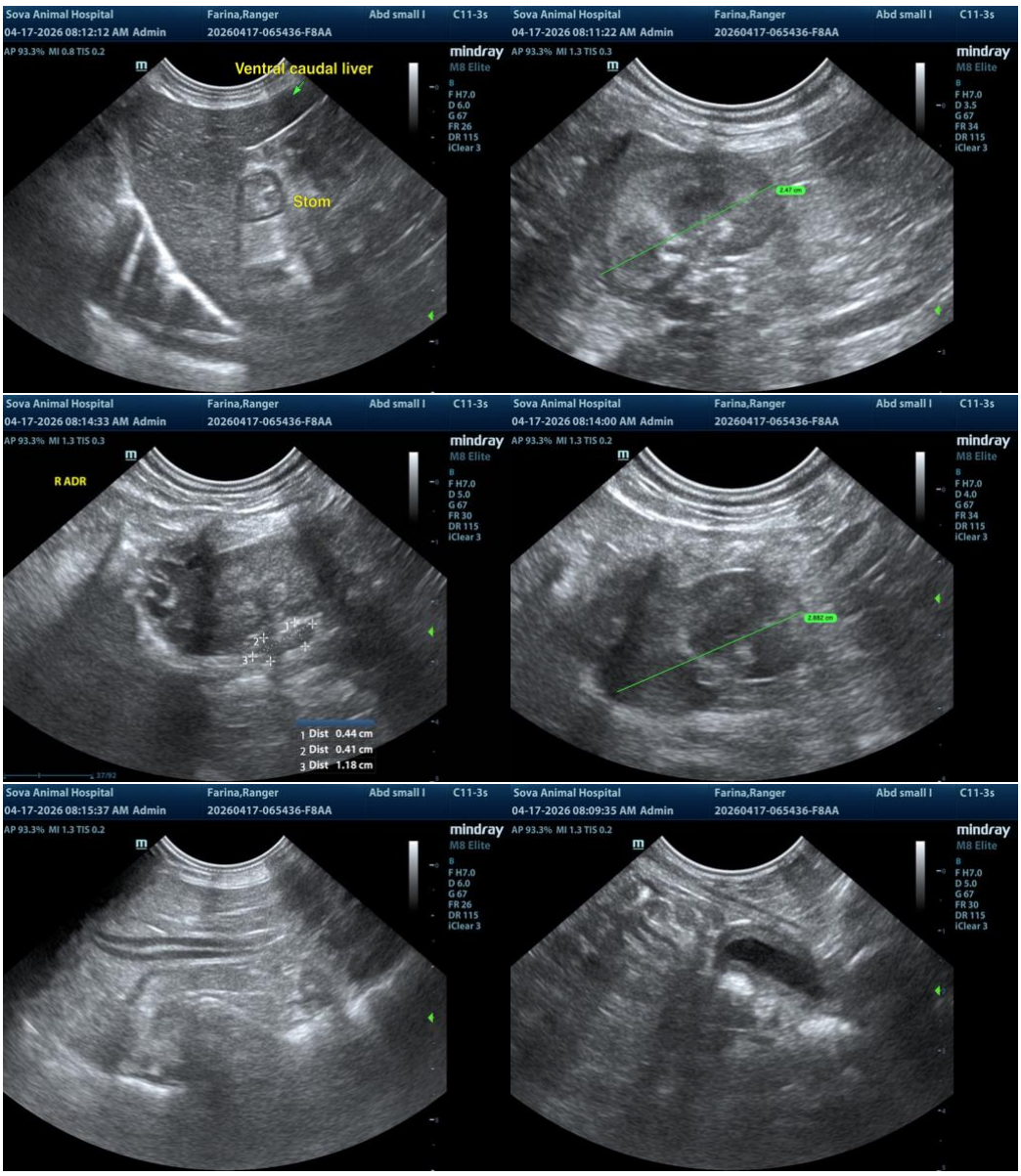

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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