



**PATIENT**

Roxy Mullens

**SPECIES**

Canine

**BREED**

Shepherd Mix

**SEX**

FS

**AGE**

12yr

**WEIGHT**

25kg

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dave Stasiuk

**HOSPITAL NAME**

Resolution Veterinary  
Ultrasound

**REFERRING VET**

Dr. LeBoldus

**INVOICE**

12618ag

**DATE**

01/06/2023

**PRESENTING CLINICAL SIGNS**

Moderate weight loss since July 2022. V/D in Nov 2022. Poor appetite. elevated ALP (400) and SDMA. Prior scan read by SonoPath in July 2022. Splenic vein thrombosis, possible FB. Benign Cushings.

**RECHECK 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 uroliths or sediment. 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 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. Pinpoint areas of medullary mineral were present. The left kidney measured 6.7 cm in length. The right kidney measured 6.3 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 0.44 cm width at the caudal pole and 0.43 cm width at the cranial pole. The right adrenal gland was not definitively visualized without overt pathology.

**Spleen**

The spleen exhibited primarily finely textured parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Mild generalized parenchyma heterogeneity was present without evidence of nodular changes. The capsule was smooth and regular without apparent expansion. Previously noted remodeled variably echogenic splenic vein thrombus noted in the medial splenic vein which did not appear to overtly extend into the intrasplenic vasculature. The splenic vein thrombus measured ~ 5.0 x 1.1 cm. Adequate splenic vascularity. The parenchymal heterogeneity is likely consistent with benign changes such as extramedullary hematopoiesis or age related remodeling with minor potential for inflammatory or neoplastic disease.

**Liver/Gallbladder**

The liver exhibited regional to generalized enlargement with severely heterogenous irregular to nodular parenchyma. A mildly expansive irregular mixed echogenic intraparenchymal mass was present in the subjective mid to left liver measuring ~ 10 cm in diameter. The mass mildly distorted the hepatic capsule without evidence of parenchymal escape. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content with mild non-organized echogenic 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 mild to moderate variably echogenic non-shadowing ingesta with no signs of ileus, 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 ileus, obstruction or foreign material.

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

**SPECIES**

Canine

**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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Shepherd Mix

**Free Abdomen**

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

**SEX**

FS

**ULTRASONOGRAPHIC FINDINGS**

- Previously noted static to remodeled splenic vein thrombus
- Severely heterogenous nodular to irregular liver with mildly expansive mixed echogenic mid to left intraparenchymal mass
- Mild gallbladder debris (non-mucocele)
- Sonographically unremarkable GI tract/colon with variably echogenic gastric ingesta
- Bilateral chronic renal changes

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Significant progressive heterogenous to nodular hepatic parenchyma changes compared to the previous study with newly noted mid to left liver mass. Considerations may include vacuolar hepatopathy, inflammatory/immune mediated disease, hematopoiesis, marked parenchymal hyperplasia, lipogranulomas with concern for hepatic neoplastic criteria given concurrent chronic weight loss. Assuming normal clotting status and using a 25g needle, a liver mass and parenchyma FNA for screening cytology is warranted for further assessment. Some degree of metabolic gastric stasis may be present if documented NPO. A GI panel to include PLI/TLI/Cobalamin/Folate is recommended. Although considered unlikely considering normal adrenal presentation, a resting cortisol level to rule out occult disease is recommended. Three view chest radiographs are suggested if not done.

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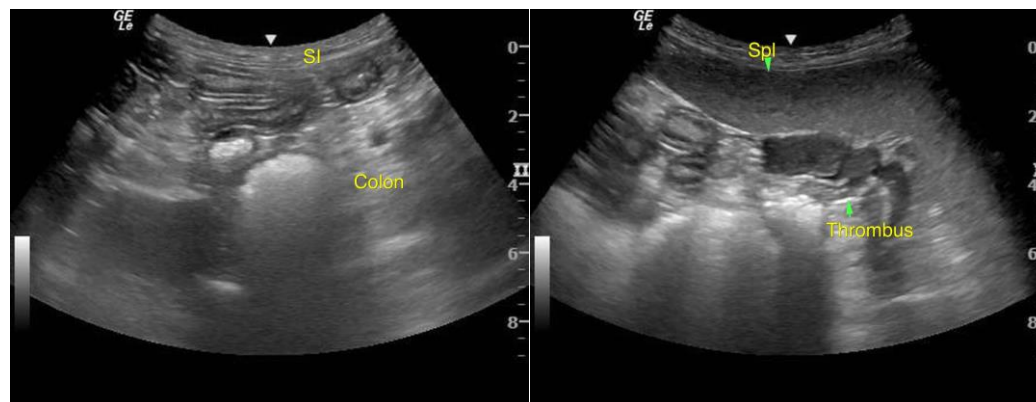
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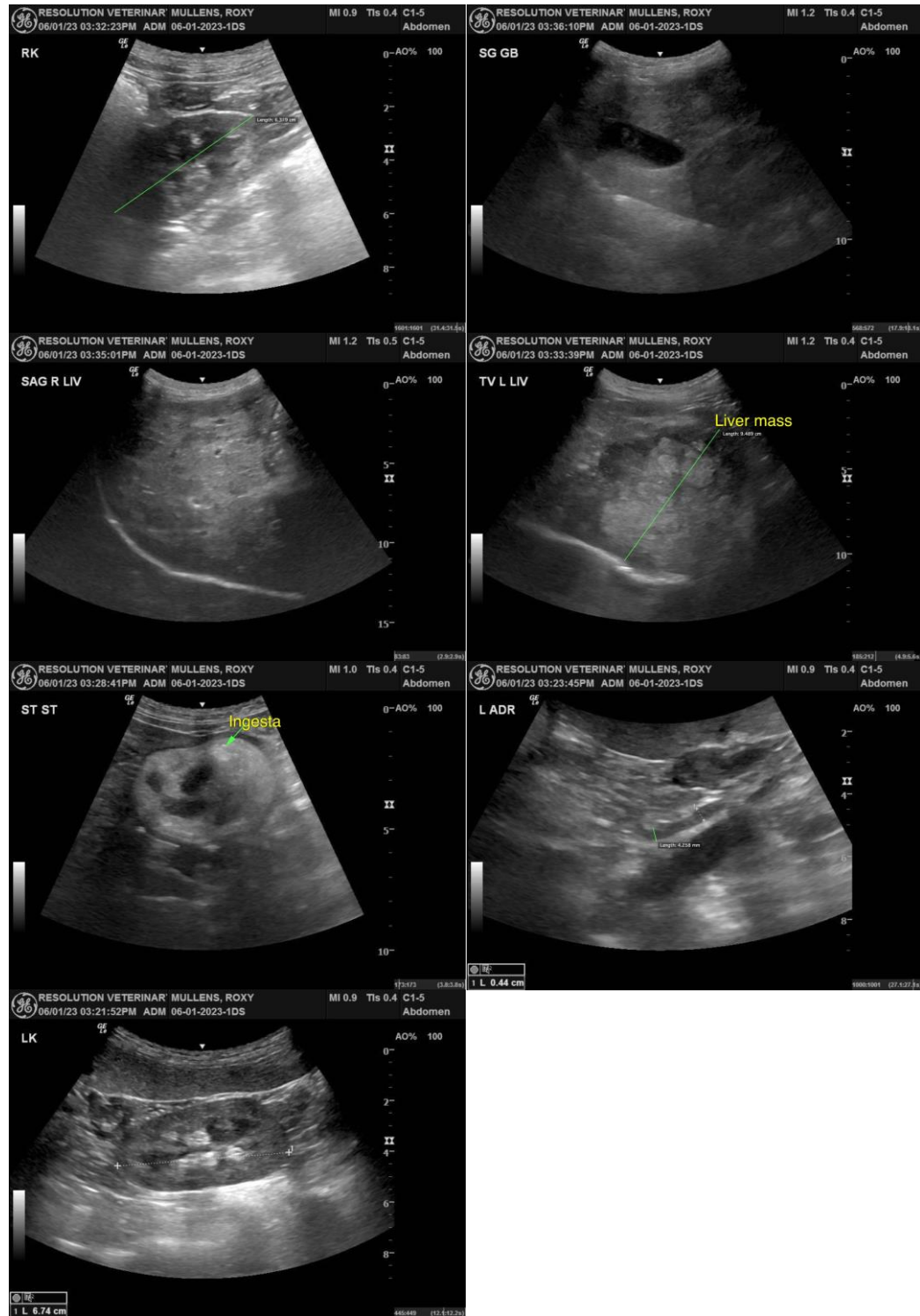
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I



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can be of any further assistance, please contact me.

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