



**PATIENT PRESENTING CLINICAL SIGNS**

**Bolt Bindrim** Exercise intolerance the last few years, but recently several collapsing events noted by owner (last few days) . Has been on Grain-free diet Primary Question/Differential to Be Answered in This Exam  
**Evidence of anemia and mildly elevated bilirubin. Consider IMHA, splenic/liver mass.**

**SPECIES**

Canine

Abnormal PE/Chem/CBC/UA Results: HCT 38% low RBC, Hemoglobin, MCV, MCH, MCHC  
Reticulocytosis Tbil - 0.6, unconBil 0.4, conBil = 0.2 - all mildly elevated Cardiopet proBNP =N T4 is wnl at 1.1

**BREED**

Labrador Retriever

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**SEX**

**Urinary System**

MN

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.

**AGE**

10yr

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 7.5 cm in length. The right kidney measured 7.3 cm in length.

**WEIGHT**

77lb

**INTERPRETED BY**

The area of the aortic trifurcation was free of pathology.

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

The area of the residual prostate appeared normal and free of pathology measuring 1.8 cm in diameter.

**IMAGING PERFORMED BY**

**Adrenal Glands**

Jenna Walsh CVT

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.70 cm width at the caudal pole and 2.8 cm length. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.74 cm width at the caudal pole and 2.5 cm length.

**Spleen**

**HOSPITAL NAME**

Countryside Animal  
Clinic

The spleen exhibited mild cranial to generalized enlargement with a symmetrical capsule contour and subtle cranial splenic parenchyma heterogeneity. No splenic masses or nodules. Normal splenic vascularity. A small pocket of scant free fluid was noted between the cranial spleen and caudal left liver. The cranial spleen measured ~ 4.0 cm in width.

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**Liver/Gallbladder**

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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. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The common bile duct was not definitively visualized. No evidence of post hepatic obstructive criteria.

**DATE**

04/28/2023

**Gastrointestinal**



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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.

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 or overt lymphadenopathy was present.

A small pocket of scant free fluid was noted between the cranial spleen and caudal left liver.

**ULTRASONOGRAPHIC FINDINGS**

- Subjective mild cranial to generalized splenomegaly.
- Sonographically unremarkable liver/gallbladder.
- Scant pocket of perisplenic free fluid.
- Mild age related renal changes.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Overall, there is no overt evidence of significant abdominal visceral pathology, intra-abdominal masses or post hepatic obstruction criteria. The mild cranial to potential generalized splenomegaly is non-specific with considerations including reactive hyperplasia or hematopoiesis given the anemia, incidental splenitis while the possibility of early infiltrative neoplasia cannot be definitively excluded.

Assuming normal clotting status and using a 25g needle, a splenic or hepatosplenic FNA for screening cytology is warranted for further assessment. Three view chest radiographs are recommended if not done to assess for occult thoracic pathology as well as cardiac assessment given the patient history.

Sonographic monitoring of the spleen may be indicated if radiographic evidence of persistent/progressive splenomegaly. Full echocardiographic work up +/- ECG may be considered given patient history of grain free diet and exercise intolerance.



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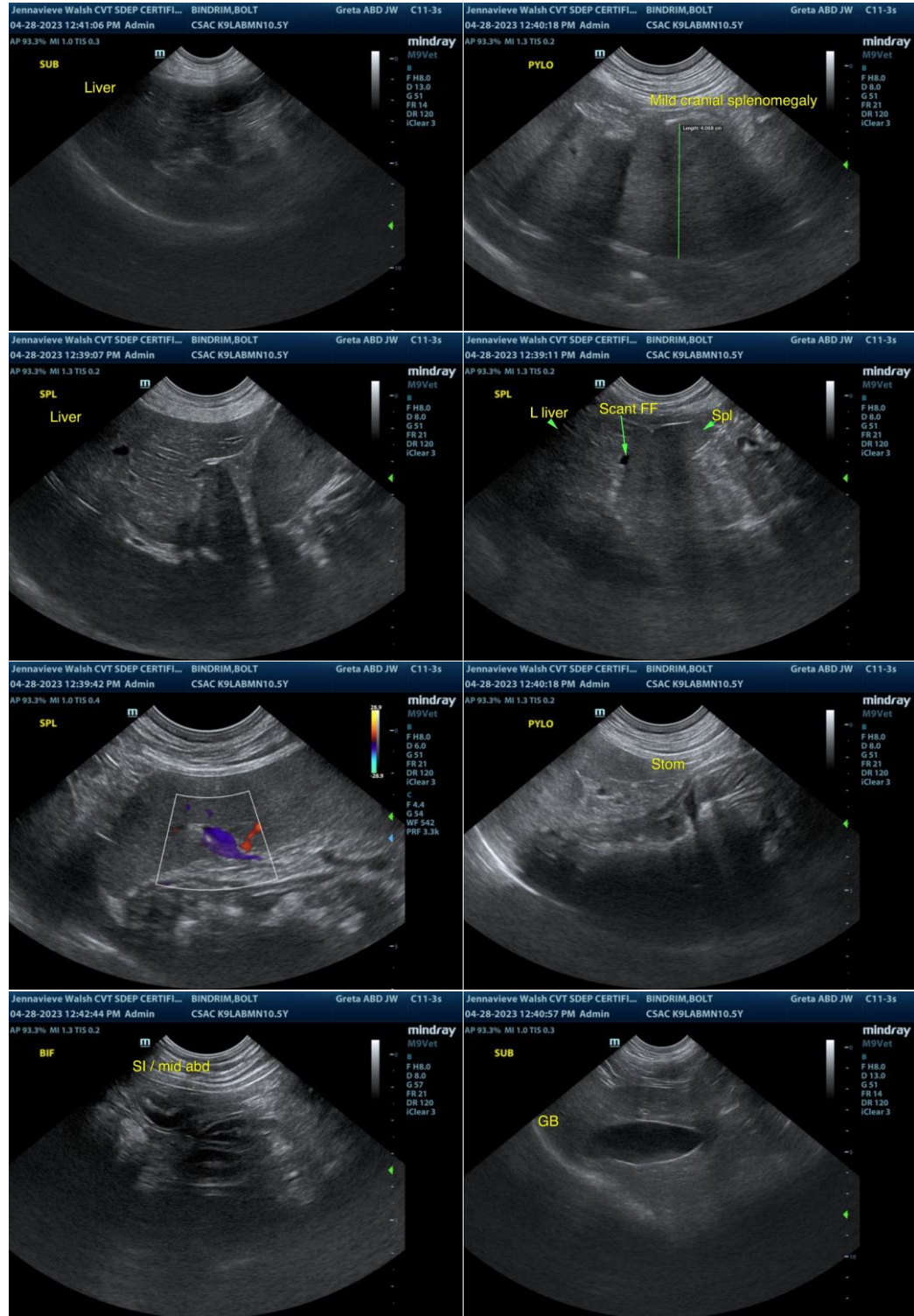
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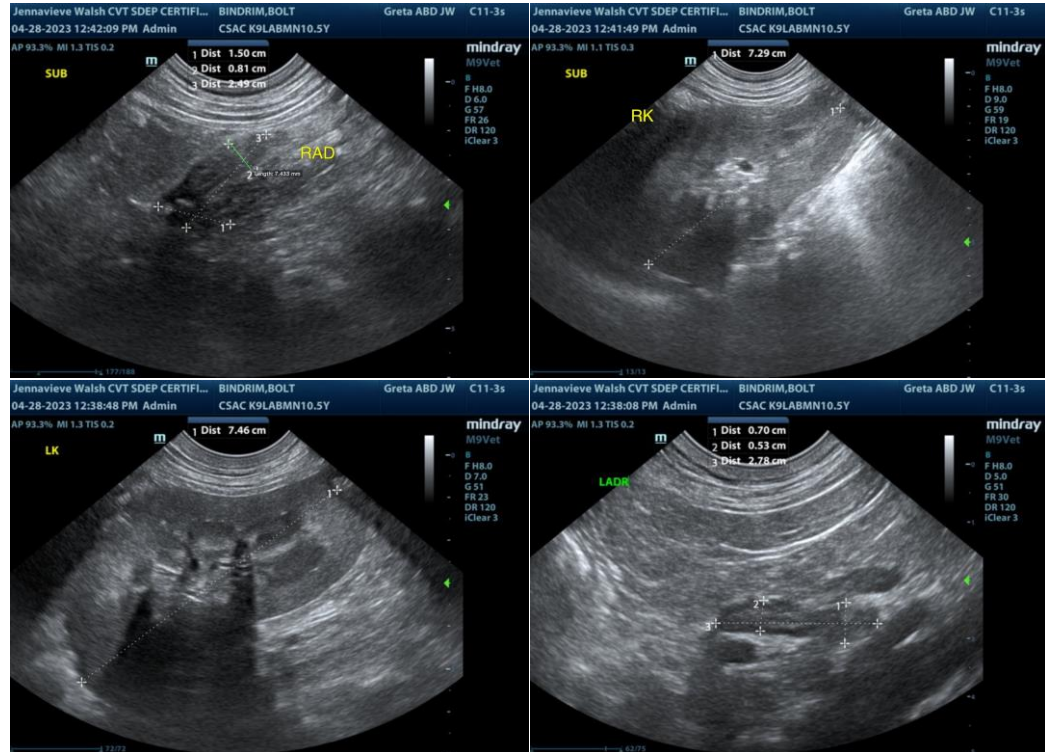
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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