



**PATIENT PRESENTING CLINICAL SIGNS**

Eli Knittel  
 Elevated liver values, pannus.  
 Medication: Denamarin, Ursodial, Cyclosporine, PreAcetate

**SPECIES**  
 ALP 1894  
 Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED** *Urinary System*

Lab Mix  
 The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 4.0 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 was noted.

**SEX**  
 MN  
 The area of the residual prostate was free of overt pathology.

**AGE**  
 The area of the aortic trifurcation was free of pathology.

10 Y  
 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 7.8 cm in length. The right kidney measured 7.4 cm in length.

**WEIGHT**  
 73.3

**Adrenal Glands**

**INTERPRETED BY**

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

The left and right adrenal glands were uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 2.5 cm length x 0.62 cm width at the caudal pole. The right adrenal gland measured 2.6 cm length x 0.51 cm width at the caudal pole. No evidence of adrenomegaly or adrenal tumors was noted.

**IMAGING**

**PERFORMED BY**  
 Rebekah Jakum, CVT  
 ARDMS/RVT

**Spleen**

The spleen exhibited potential for mild generalized enlargement yet maintained symmetrical capsule contour and primarily finely textured homogeneous parenchyma. Normal splenic vascularity was noted. A solitary, nondisruptive, hypoechoic to mildly nonhomogeneous nodule was noted in the caudal spleen measuring 1.6 cm in diameter.

**HOSPITAL NAME**

VCA Willow Mill AH

**Liver/Gallbladder**

**REFERRING VET**

Dr. Munkittrick

The liver exhibited mild enlargement yet maintained symmetrical capsule contour with normal hepatic parenchyma echogenicity exhibiting moderate coarse echotexture with evidence of mild parenchymal remodeling. Intermittent, discrete, hypoechoic intraparenchymal nodules were noted. An example of a liver nodule measured 2.4 cm in diameter. 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 cystic and common bile ducts were normal.

**INVOICE**

14969

**DATE**

9-23-22



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***Gastrointestinal***

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained moderate, ingesta exhibiting progressive distal acoustic shadowing. The stomach was otherwise normal.

**SPECIES**

Canine

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.

**BREED**

Lab Mix

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

**SEX**

MN

***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 were evident.

**AGE**

10 Y

***Free Abdomen***

No overt lymphadenopathy or peritoneal effusion was present.

**WEIGHT**

73.3

**ULTRASONOGRAPHIC FINDINGS**

- Hepatopathy exhibiting generalized mild nonuniform to intermittent discrete nodular parenchyma
- Sonographically unremarkable gallbladder
- Possible mild splenomegaly with solitary nonspecific yet non-disruptive nodule
- Gastric ingesta - probable post prandial presentation
- Mild age-related kidneys

**INTERPRETED BY**

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

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The hepatic presentation was nonspecific with primary consideration for vacuolar hepatopathy with minor parenchymal remodeling and discrete areas of nodular to regenerative hyperplasia, and hematopoiesis. No overt evidence of neoplastic criteria, which is considered unlikely. Some contribution to the ALP elevation owing to ophthalmic medication is possible.

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Screening hepatic FNA cytology, assuming normal clotting status, could be considered for further assessment. Continued hepatosupportive medications are warranted.

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No overt suspicion of Cushing's Syndrome if no clinical signs i.e., PU/PD, Polyphagia, etc. Correlation with urinalysis may be considered.

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Potential etiologies for the splenic nodule may include benign processes such as nodular hyperplasia, extramedullary hematopoiesis, hematoma, infarction, or neoplasia. Ultrasound-guided FNA of the nodule using a 25-gauge needle and assuming normal coagulation parameters may be



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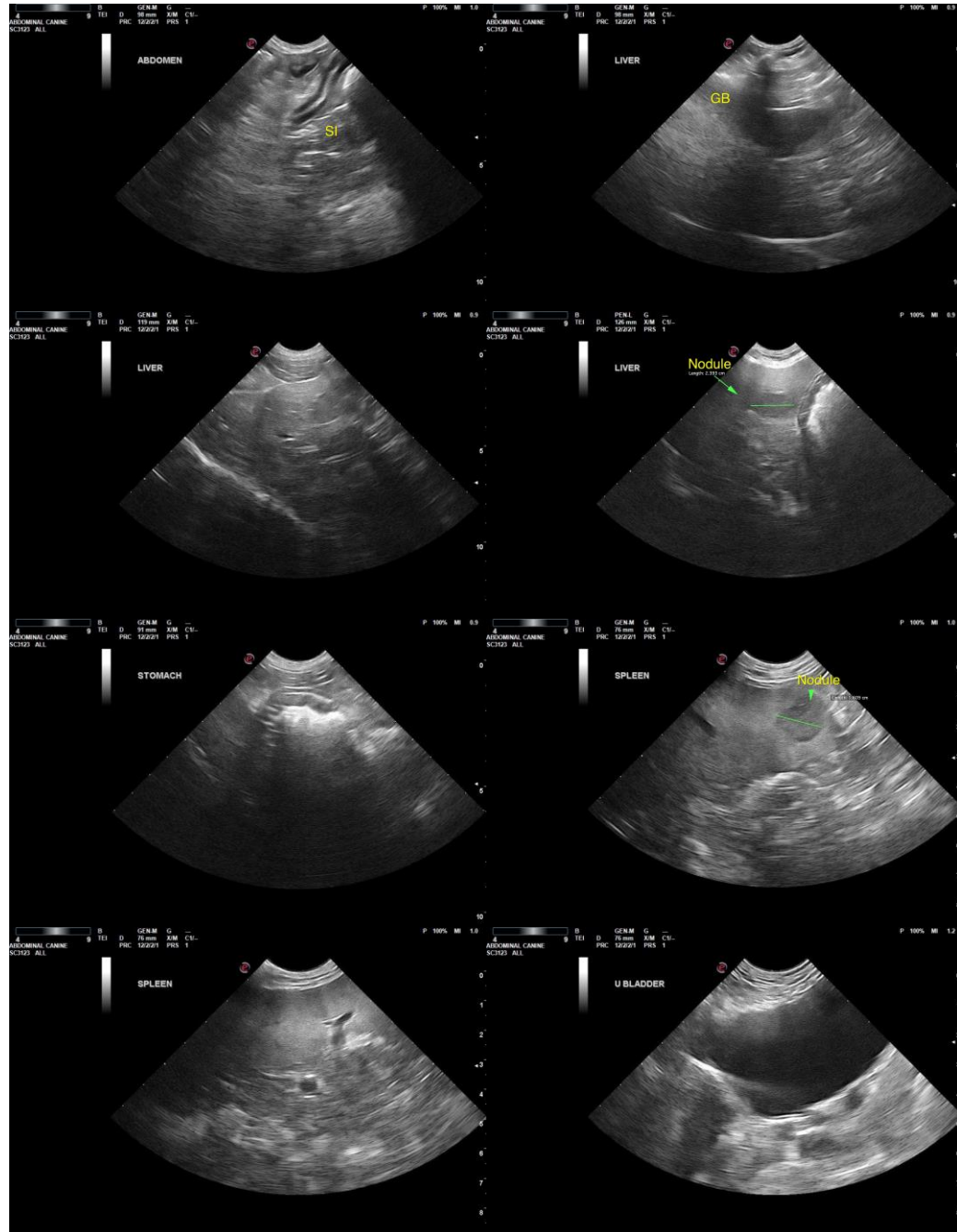
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considered. Otherwise, sonographic monitoring of the splenic nodule for any changes in size or appearance with an initial recheck in 4-6 weeks would be a more conservative approach.



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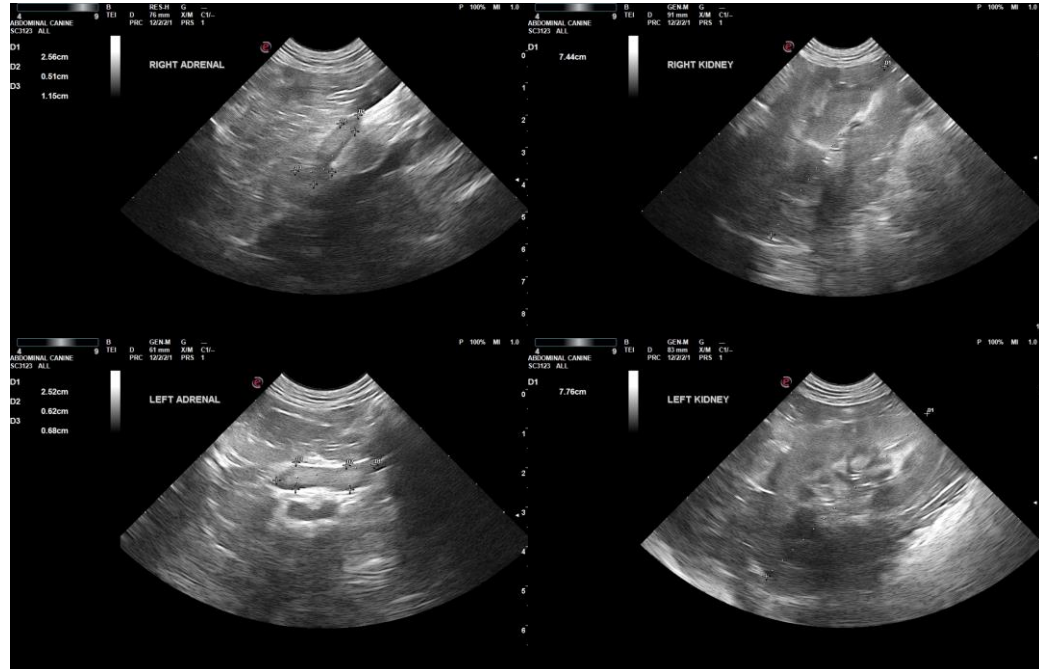
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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