



**PATIENT PRESENTING CLINICAL SIGNS**

Hamilton Cook normal PE recently had dental cleaning Primary Question/Differential to Be Answered in This Exam r/o splenic diz, neoplasia

**SPECIES** Abnormal PE/Chem/CBC/UA Results: nucleated RBCs

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED** *Urinary System*

Keeshound 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.

**SEX**

MN

**AGE**

9yr

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 5.2 cm in length. The right kidney measured 5.7 cm in length.

**WEIGHT**

35lb

The area of the aortic trifurcation was free of pathology.

*Adrenal Glands*

**INTERPRETED BY**

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

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.56 cm width at the caudal pole and 2.0 cm length. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.43 cm width at the caudal pole and 2.1 cm length.

**IMAGING PERFORMED BY**

Jenna Walsh CVT

*Spleen*

The spleen exhibited overall normal size and a primarily finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. A mildly expansive non-homogenous to focally mixed echogenic caudal splenic macronodule to small mass was present measuring ~ 2.0 cm in diameter. The macronodule/small mass mildly distorted the caudal splenic capsule. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis.

**HOSPITAL NAME**

VCA Vitality Animal  
Hospital

*Liver/Gallbladder*

**REFERRING VET**

Dr Surroz

The liver presented mildly enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with primarily anechoic luminal content and mild variably hyperechoic mildly congealed non-organized debris. No evidence of gallbladder or peripheral gallbladder inflammation was present. The cystic and common bile ducts were normal.

**INVOICE**

14535ag

**DATE**

08/08/2023

*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, overt lymphadenopathy or peritoneal effusion/hemoabdomen was present.

**ULTRASONOGRAPHIC FINDINGS**

- Non-specific small mildly expansive mixed echogenic splenic macronodule/small mass.
- Mild chronic renal changes.
- Subjective mild hepatomegaly-sonographically benign.
- Gallbladder debris (non-mucocele).

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The splenic macronodule/small mass was non-specific with considerations including hyperplasia, hematopoiesis, granuloma, myelolipoma, focal splenitis or emerging neoplasia possible.

Assuming normal clotting status and using a 25g needle, a splenic macronodule/small mass FNA for screening cytology may be considered for further assessment.

Given the relatively small presentation of the splenic macronodule/small mass without evidence of intra-abdominal metastasis, sonographic monitoring for evidence of progression with initial recheck in 4 weeks would be reasonable. Splenic biopsy would likely be required for a definitive diagnosis. Three view chest radiographs are recommended if not done to assess for occult thoracic pathology.



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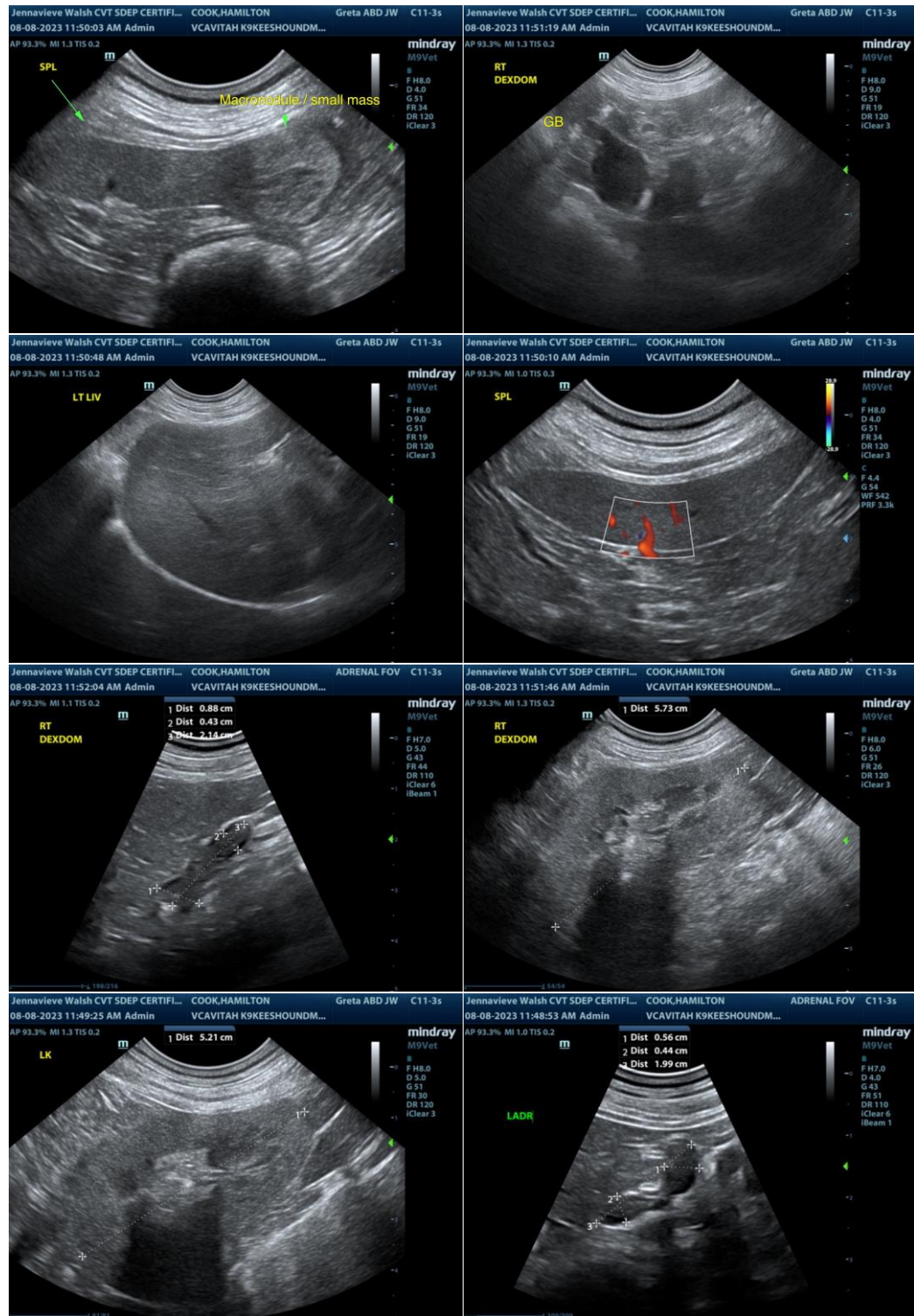
Dr Surroz

**INVOICE**

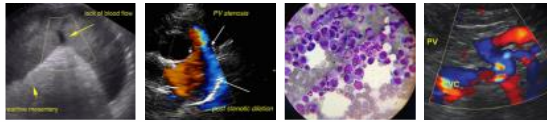
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The information and recommendations provided are based on the images presented by the referring



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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)

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