

**PATIENT PRESENTING CLINICAL SIGNS**

Brutus Brennan Grade III-IV/VI systolic murmur; lungs clear. BP: 180, 190, 190 mmHg. Past history grain-free diet. Radiographs: borderline Cardiomegaly, mild hepatomegaly. No clinical signs. Having bi-cavity ultrasound exams.

**SPECIES**

Canine Abnormal PE/Chem/CBC/UA Results: ALP 155, PLT 517, UMA>30.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED**

**Urinary System**

Cavalier King Charles Spaniel The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 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 were noted.

**SEX**

MN

**AGE**

8.5yr

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 6.6 cm in length. The right kidney measured 6.5 cm in length.

**WEIGHT**

29lb

The area of the aortic trifurcation was free of pathology.

The area of the residual prostate 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 0.50 cm width at the caudal pole and 0.55 cm width at the cranial pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.59 cm width at the caudal pole and 0.68 cm width at the cranial pole.

**IMAGING PERFORMED BY**

Pamela Harrigan, RDCS

**Spleen**

**HOSPITAL NAME**

VCA Hanson Animal Hospital

The spleen exhibited mild parenchymal heterogeneity with a solitary mildly expansive well demarcated hypoechoic to non-homogeneous macronodule/small mass in the mid to cranial spleen measuring 2.2 cm in diameter. The mass subtly distorted the splenic capsule without evidence of parenchymal escape. A concurrent well demarcated hyperechoic nodule consistent with benign myelolipoma adjacent to the splenic hilus was present.

**REFERRING VET**

Dr. Oscar

**Liver**

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.

**INVOICE**

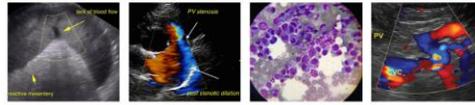
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The gallbladder was non-distended in size with primarily anechoic luminal content and minor non-dependent particulate debris. The cystic and common bile ducts were normal.

**DATE**

08/29/2022

**Gastrointestinal**



**PATIENT**

Brutus Brennan

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.

**SPECIES**

Canine

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. Minor upper duodenal retained fluid was noted with no signs of ileus, obstruction or foreign material.

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

**BREED**

Cavalier King Charles Spaniel

**Pancreas**

The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.

**Free Abdomen**

**SEX**

MN

No omental masses, lymphadenopathy or peritoneal effusion was present.

**AGE**

8.5yr

**ULTRASONOGRAPHIC FINDINGS**

- Benign low grade hepatopathy
- Minor non-dependent gallbladder debris (non-mucocele)
- Expansive splenic macronodule/small mass with concurrent perihilar benign myelolipoma
- Mild pancreatic remodeling

**WEIGHT**

29lb

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**INTERPRETED BY**

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

The splenic nodule/mass is nonspecific with considerations including hyperplasia, hematopoiesis, granuloma, splenitis, infarct or neoplasia (sarcoma, round cell neoplasia, other). Assuming normal clotting status and using a 25g needle a splenic nodule FNA +/- hepatic FNA (given the elevated ALP) is recommended for screening cytology. The hepatopathy was non-specific and may be consistent with idiopathic vacuolar hepatopathy with potential reactive hepatopathy secondary to low grade immune response sometimes seen with GI disease or low-grade pancreatitis if clinically applicable.

**IMAGING PERFORMED BY**

Pamela Harrigan, RDCS

Pending hepatic FNA, a hydrolyzed diet trial, probiotics, prophylactic deworming as well as hepatosupportive medication such as Denamarin +/- Ursodiol would be reasonable. Pending echocardiogram and three view chest radiographs to rule out evidence of thoracic pathology, splenectomy with hepatic biopsies or sonographic monitoring of the splenic nodule/small mass for evidence of progression with initial recheck in 4 weeks could be considered.

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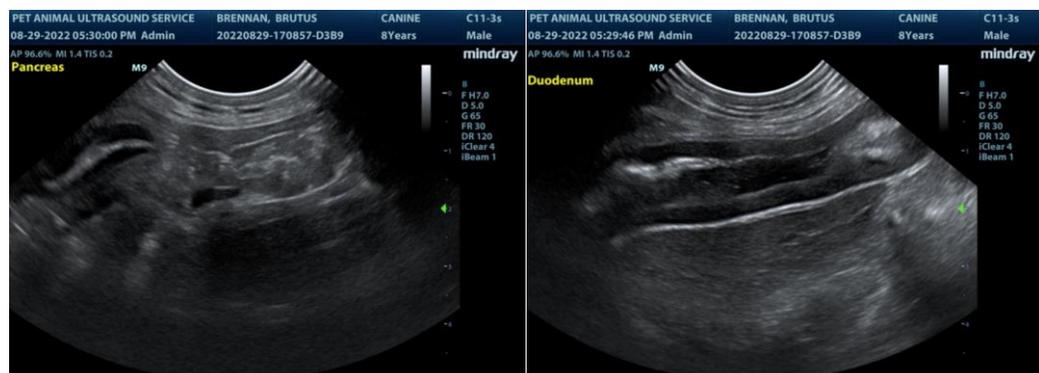
Dr. Oscar

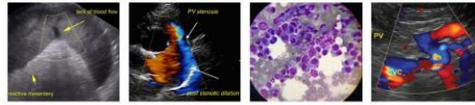
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**PATIENT**

Brutus Brennan

**SPECIES**

Canine

**BREED**

Cavalier King Charles  
 Spaniel

**SEX**

MN

**AGE**

8.5yr

**WEIGHT**

29lb

**INTERPRETED BY**

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

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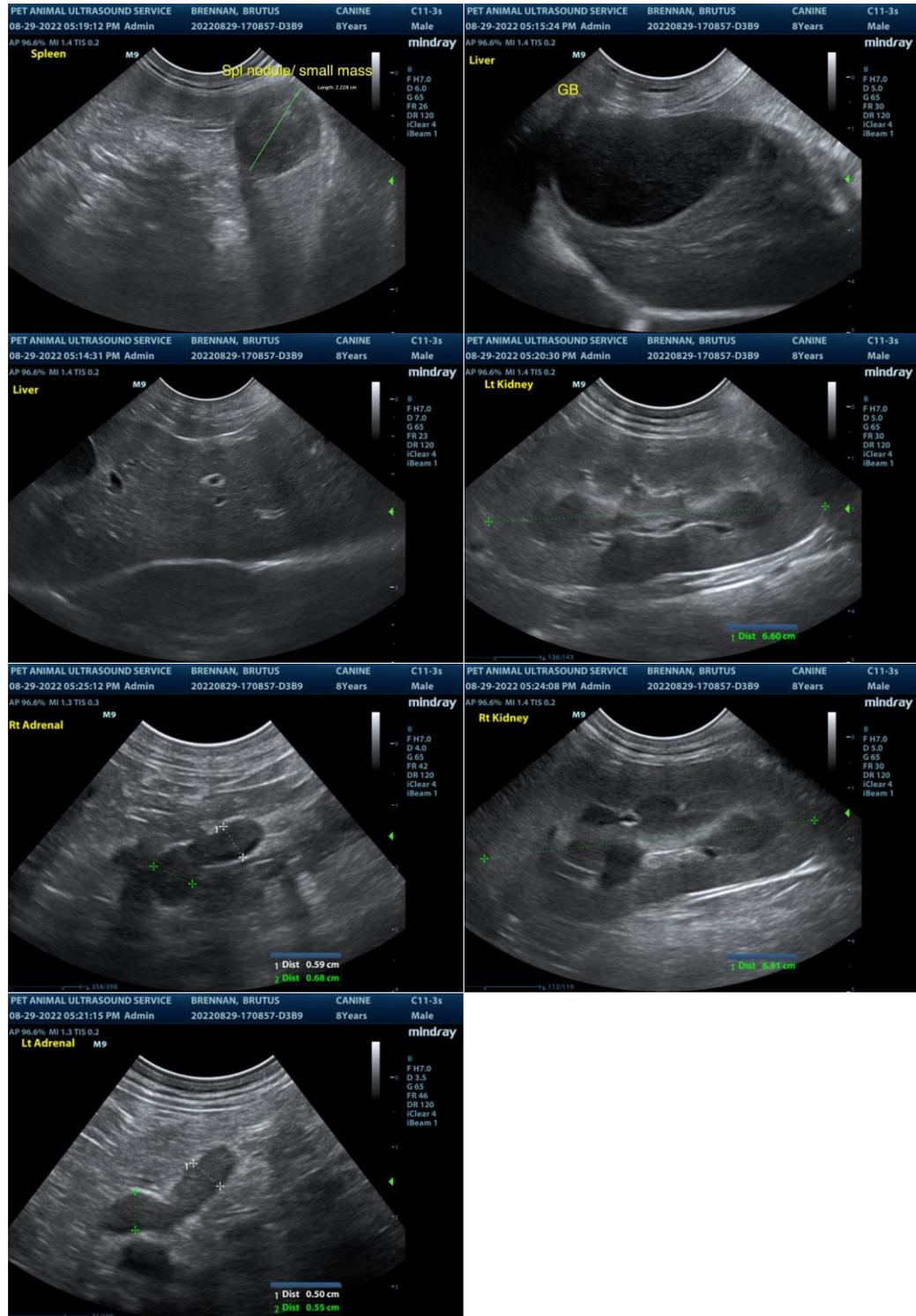
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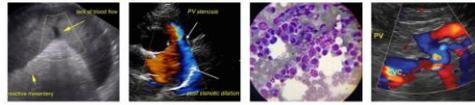
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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



**PATIENT**

can be of any further assistance please contact me.

Brutus Brennan

**SPECIES**

**R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)**  
info@SonoPath.com

Canine

**BREED**

Cavalier King Charles  
Spaniel

**SEX**

MN

**AGE**

8.5yr

**WEIGHT**

29lb

**INTERPRETED BY**

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DABVP (Canine and Feline)

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