



**PATIENT**

Prima Frampton

**PRESENTING CLINICAL SIGNS**

Patient presented ataxic and has a history of chronically elevated liver values.

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**\*\*The submitted study contained 16 videos and 12 still images for review.**

**BREED**

Lab X

**Urinary System**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3.0 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**

Spayed Female

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 loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 5.6 cm. The right kidney measured 6.0 cm.

**AGE**

15 Years

**Adrenal Glands**

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 2.3 cm length x 0.78 cm at the caudal pole. The right adrenal gland was indistinctly visualized without overt pathology, subjectively measuring 2.0 cm length x 0.41 cm at the caudal pole.

**WEIGHT**

18.05 kg

**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. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. 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.

**INTERPRETED BY**

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

**Liver**

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild to benign parenchymal remodeling. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non distended in size with echogenic, nonmineralized, non dependent biliary sludge. The biliary sludge was non organized with a hypoechoic to anechoic, irregular to interrupted rim visible between the nondependent sludge and inner wall. No signs of peripheral inflammation.

**IMAGING PERFORMED BY**

Dr. Alyssa Carver

**Gastrointestinal**

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.

**HOSPITAL NAME**

Animal Emergency  
Hospital Volusia

**REFERRING VET**

Dr. Alyssa Carver

**INVOICE**

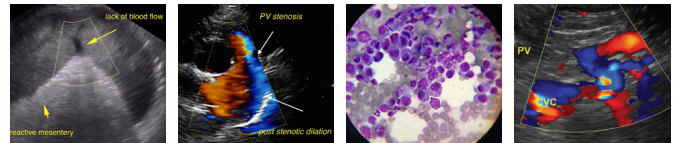
35650

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.

**DATE**

2/14/22

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



**PATIENT**

**Pancreas**

Prima Frampton

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.

**SPECIES**

**Free Abdomen**

Canine

No omental masses, lymphadenopathy or effusion.

**BREED**

**ULTRASONOGRAPHIC FINDINGS**

Lab X

- Chronic hepatopathy with parenchymal remodeling
- Partial gallbladder mucocele
- Moderate chronic renal changes

**SEX**

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Spayed Female

The presentation of the liver may indicate vacuolar hepatitis, chronic active hepatitis, cholangiohepatitis, early fibrosis / cirrhosis or other hepatopathy. Neoplasia considered a less likely differential diagnosis yet cannot be excluded.

**AGE**

15 Years

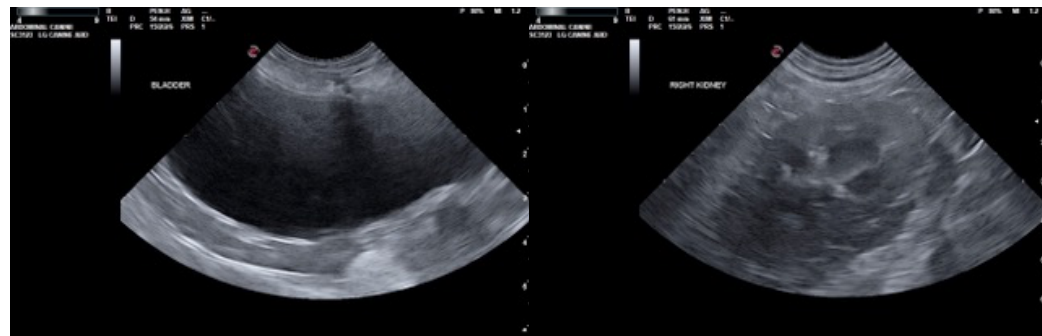
If not currently instituted, hepatosupportive medications including Denamarin and Ursodiol are suggested with close monitoring for evidence of persistent/progressive cholestasis. Subjectively, the bilateral adrenal glands and hepatic presentation were not overtly suggestive of underlying endocrinopathy. Assessment of T4 levels (if not recently done) suggested. Depending on the degree of hepatic enzyme elevation, fasting and post-prandial bile acids to assess hepatic functionality, given the reported ataxia in this patient, may be indicated. Otherwise, largely geriatric abdomen without evidence of significant intraabdominal pathology. Thorough neurological examination or potential neurology consult may be considered.

**WEIGHT**

18.05 kg

**INTERPRETED BY**

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



**IMAGING PERFORMED BY**

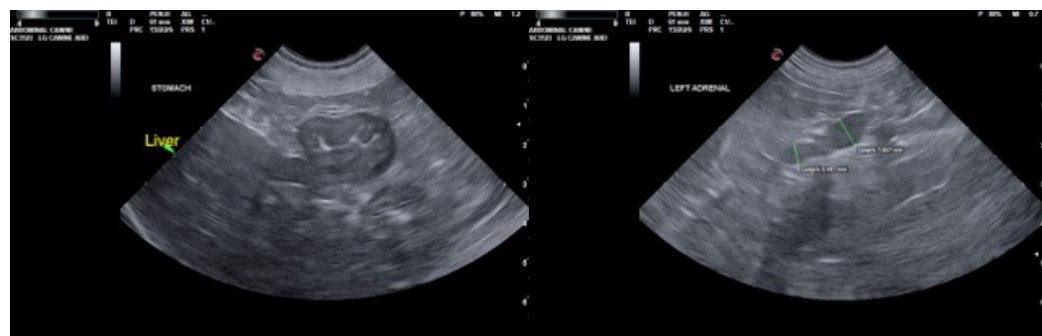
Dr. Alyssa Carver

**HOSPITAL NAME**

Animal Emergency  
Hospital Volusia

**REFERRING VET**

Dr. Alyssa Carver

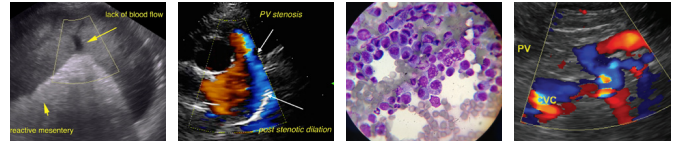


**INVOICE**

35650

**DATE**

2/14/22



**PATIENT**

Prima Frampton

**SPECIES**

Canine

**BREED**

Lab X

**SEX**

Spayed Female

**AGE**

15 Years

**WEIGHT**

18.05 kg

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Alyssa Carver

**HOSPITAL NAME**

Animal Emergency  
Hospital Volusia

**REFERRING VET**

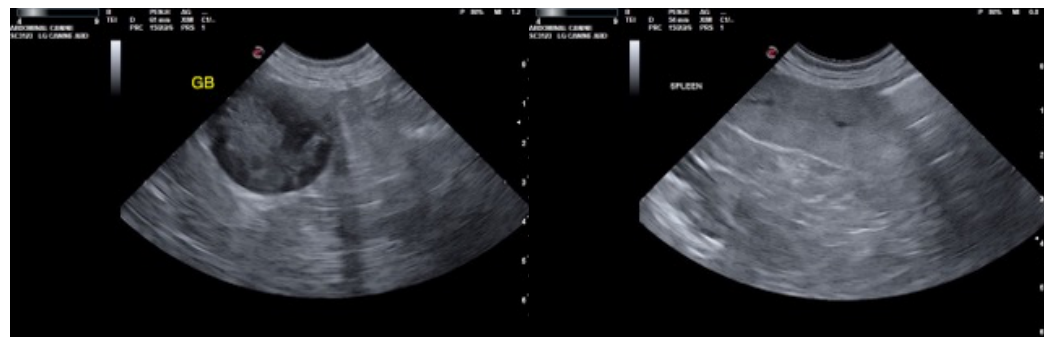
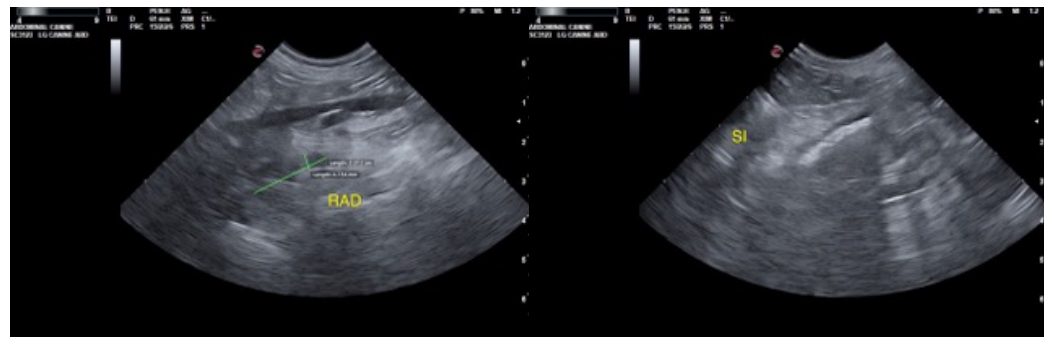
Dr. Alyssa Carver

**INVOICE**

35650

**DATE**

2/14/22



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.

**R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)**

info@SonoPath.com