



**PATIENT**

Bertie Fryman

**PRESENTING CLINICAL SIGNS**

O reports vomiting and anorexia over the last 3 days. Has been dealing with pancreatitis and elevated liver values with rDVM.

**SPECIES**

Canine

Abnormal PE/Chem/CBC/UA Results

Elevated ALT - 680 IU/L (18-121), ALKP - 292 IU/L (5-160), GGT - 18 IU/L (0-13) and lipase 564 IU/L (0-250).

**BREED**

Yorkshire Terrier

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

**SEX**

MN

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2 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**

8YO

Normal size and margination were 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 3.7 cm in length. The right kidney measured 4.0 cm in length.

**WEIGHT**

7.8kg

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 0.49 cm width at the caudal pole and 0.62 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 0.41 cm width at the caudal pole and 0.42 cm width at the cranial pole.

**Spleen**

**IMAGING PERFORMED BY**

Alejandro Lumbreras  
RVT

The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. 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. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

**HOSPITAL NAME**

Central Island  
Veterinary Emergency  
Hospital

**Liver**

**REFERRING VET**

Dr. Nikolas Bell

The liver was subjectively normal in size, structure, and contour. Mild decreased parenchyma echogenicity exhibiting mildly coarse uniform texture and subjective mild increased prominence of portal vascular borders was present.

**INVOICE**

10965ag

The gallbladder was distended in size with mildly thickened walls. The gallbladder lumen was occupied by mildly hyperechoic congealed to organized sludge along with suspected areas of concurrent hypoechoic mucus. Subtle evidence of peripheral inflammation noted. No evidence of peritoneal free fluid was observed. The cystic and common bile ducts were normal.

**Gastrointestinal**

**DATE**

06/26/2022

The stomach presented mild wall thickening secondary to echogenic mucosa hypertrophy. Intact wall layering was maintained and distinct. The gastric body wall measured 0.33 cm width. Mild gastric



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distension with primarily anechoic fluid was present. The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained mild retained anechoic gastric fluid with no signs of ileus, obstruction or foreign material.

**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.

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

**BREED**

Yorkshire Terrier

**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.

**SEX**

MN

**Free Abdomen**

No overt lymphadenopathy or peritoneal effusion was present.

**AGE**

8YO

**ULTRASONOGRAPHIC FINDINGS**

- Gallbladder mucocele
- Hepatopathy
- Mild gastritis with mild gastric hypomotility

**WEIGHT**

7.8kg

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The gallbladder was consistent with gallbladder mucocele with probable concurrent to secondary benign hepatopathy which could indicate concurrent hepatobiliary inflammation and cholestasis. No overt evidence of active pancreatitis although concurrent low grade to chronic pancreatitis may be present and appear sonographically normal. Given this presentation and assuming normal clotting status, cholecystectomy with hepatic biopsies is indicated. Perioperative appropriate antibiotic use is warranted. Assessment of T4 levels if not recently done is suggested as hypothyroidism has been associated with gallbladder mucoceles.

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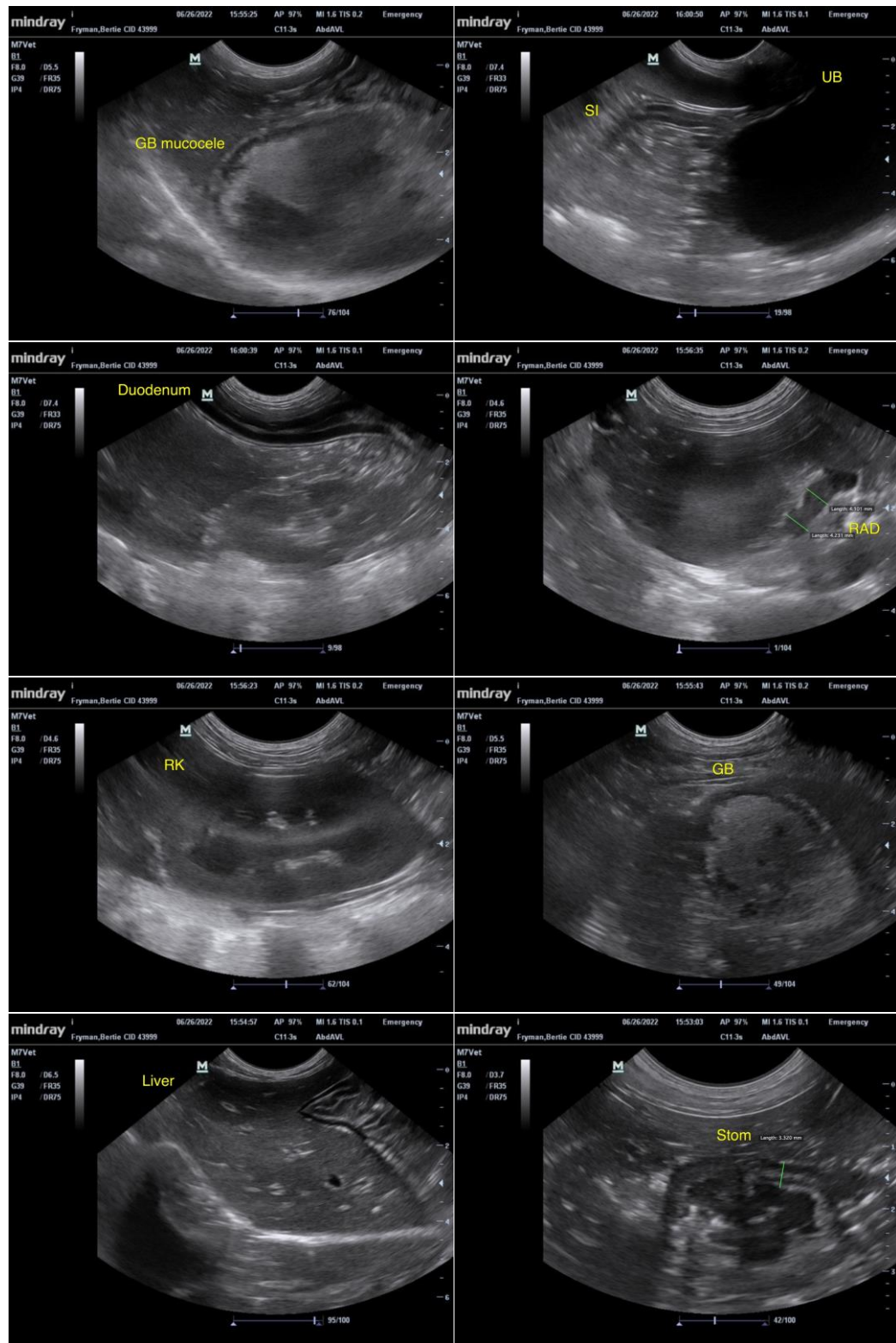
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## SPECIES

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## BREED

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## SEX

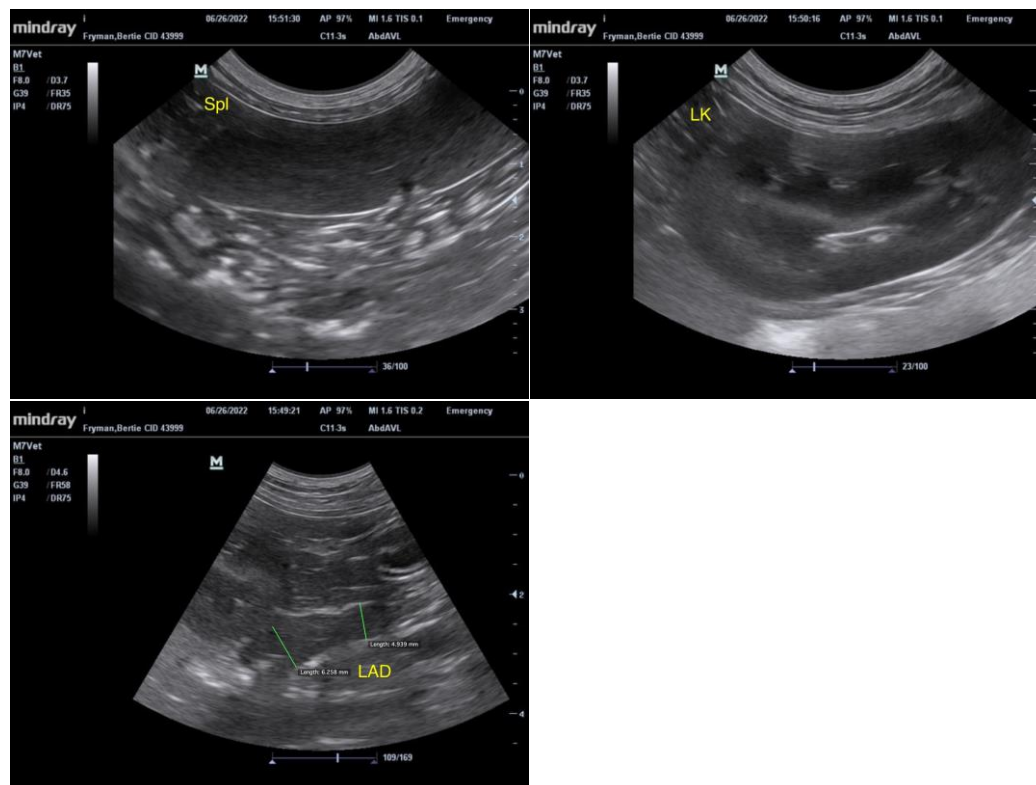
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## AGE

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## WEIGHT

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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.

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

info@SonoPath.com