

**PATIENT PRESENTING CLINICAL SIGNS**

Louie Kreuger History: Weight loss, decline in appetite, PU/PD

**SPECIES** Abnormal PE/Chem/CBC/UA Results: CBC -wnl, T4 -wnl, Elevated liver values (ALT, AST, ALP, bilirubin), Fpl- elevated.

Feline **ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED** *Urinary System*

DSH The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra exhibited normal thickness and tone. Anechoic urine was present in the lumen with moderate nondependent particulate to focally hyperechoic sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

**SEX** Normal renal size with asymmetrical margination was present in both kidneys. The renal cortex presented uniformly increased in echogenicity with uniform echotexture. The renal cortex appeared to be hypertrophied resulting in an altered cortex: medulla ratio. Mild loss of corticomedullary distinction was also present. The renal medullary volume was subjectively reduced. Mild nonspecific hyperechoic medullary striations were noted. The left kidney measured 4.1 cm in length. The right kidney measured 3.9 cm in length.

**WEIGHT** 12.5 The area of the aortic trifurcation was free of pathology.

**INTERPRETED BY** *Adrenal Glands*

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.42 cm. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.45 cm.

R. McKenzie Daniel, *Spleen*

DVM, DABVP (Canine and Feline) The spleen was mildly enlarged measuring 1.3 cm in width at the level of the hilus and 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. No splenic masses or nodules.

**IMAGING PERFORMED BY** Cassidy Braverman CVT

*Liver*

**HOSPITAL NAME** The liver exhibited potential for mild enlargement with normal structure and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. 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.

Bush Animal Hospital

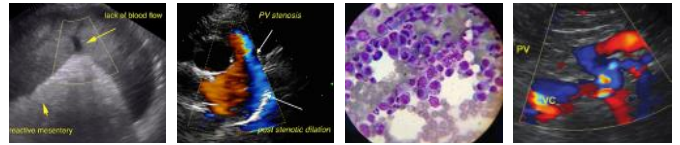
**REFERRING VET** *Gastrointestinal*

Dr. Blystone 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. The gastric body wall measured 0.26 cm in width.

**INVOICE** 10896ag 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. The small intestinal wall measured 0.23 cm in width.

**DATE**

06/21/2022



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

Louie Kreuger **Pancreas**

**SPECIES** 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.

Feline

**Free Abdomen**

**BREED** Focally enlarged mid abdominal mesenteric lymph nodes were present. These lymph nodes were homogenous, mildly hypoechoic and smoothly marginated. A normal width: length ratio was maintained (<0.5) yet several nodes exhibited abnormal width: length ration of >0.5. Evidence of regional perilymphatic inflammation and hyperechoic mesentery was evident. An example of lymph node size was 3.7 cm x 0.94 cm.

DSH

**SEX**

MN

**ULTRASONOGRAPHIC FINDINGS**

**AGE**

14

**WEIGHT**

12.5

- Moderate urinary bladder sediment
- Bilateral nonspecific chronic renal changes
- Mild splenomegaly
- Hepatopathy-subjectively benign
- Heterogeneous pancreas
- Mid abdominal hypoechoic to swollen mesenteric lymphadenopathy with perilymphatic inflammation-lymphadenitis with potential with neoplastic lymphadenopathy possible

**INTERPRETED BY** **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

R. McKenzie Daniel, DVM, DABVP (Canine and Feline) The urinary bladder sediment may suggest cellular / crystalline debris or mucus. Cystocentesis for UA +/- C/S if evidence of inflammatory cells is recommended.

Assuming normal clotting status a hepatosplenic and lymphatic FNA using a 25g needle is warranted for screening cytology given the patient's weight loss.

**IMAGING PERFORMED BY**

Cassidy Braverman CVT

Potential for low grade to chronic pancreatitis or structurally insignificant IBD both of which can present sonographically normal or potential triad disease given the concurrent liver elevations is possible in this patient. A GI panel to include PLI/TLI/Cobalamin/Folate is recommended as well as three view chest radiographs to rule out occult thoracic pathology.

**HOSPITAL NAME**

Bush Animal Hospital

Pending recommended cytology, empirical GI support, therapy for low grade pancreatitis with potential Zithromax/metronidazole combination given the possibility of lymphadenitis and sonographic monitoring with assessment of clinical response would be reasonable.

**REFERRING VET**

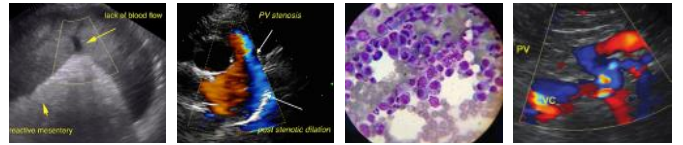
Dr. Blystone

**INVOICE**

10896ag

**DATE**

06/21/2022



**PATIENT**

Louie Kreuger

**SPECIES**

Feline

**BREED**

DSH

**SEX**

MN

**AGE**

14

**WEIGHT**

12.5

**INTERPRETED BY**

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

**IMAGING  
PERFORMED BY**

Cassidy Braverman CVT

**HOSPITAL NAME**

Bush Animal Hospital

**REFERRING VET**

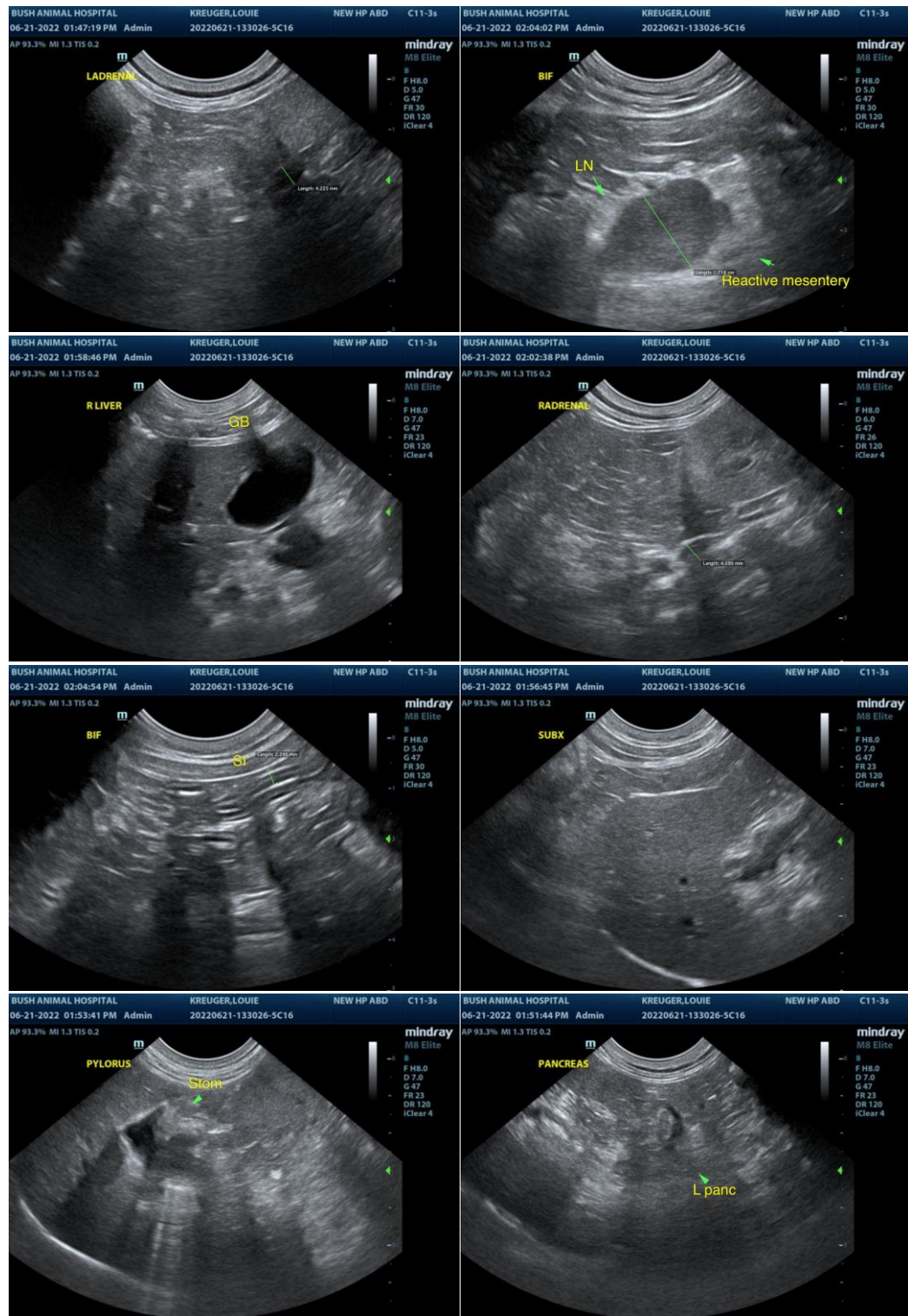
Dr. Blystone

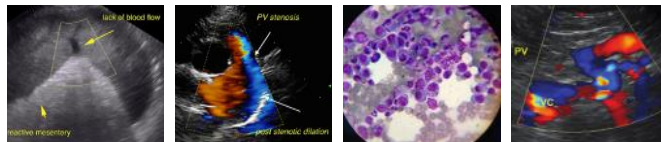
**INVOICE**

10896ag

**DATE**

06/21/2022





**PATIENT**

Louie Kreuger

**SPECIES**

Feline

**BREED**

DSH

**SEX**

MN

**AGE**

14

**WEIGHT**

12.5

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Cassidy Braverman CVT

**HOSPITAL NAME**

Bush Animal Hospital

**REFERRING VET**

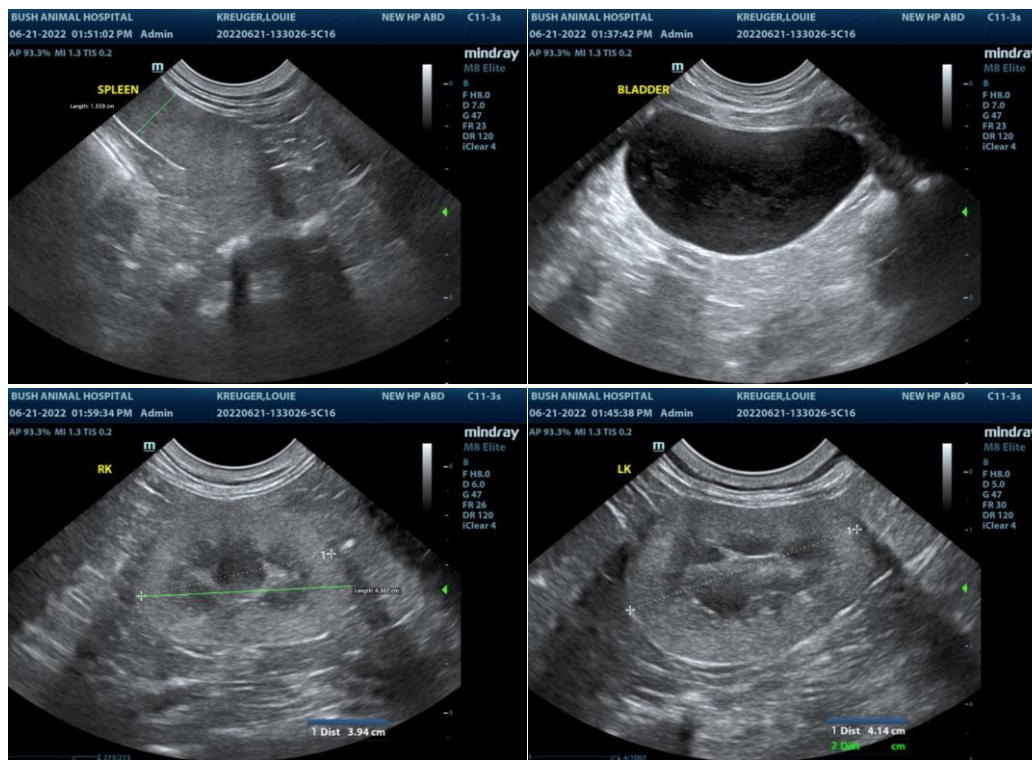
Dr. Blystone

**INVOICE**

10896ag

**DATE**

06/21/2022



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