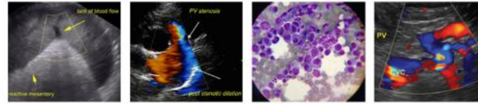
PAUS
Pet Animal Ultrasound Service



SonoPath
Clinical Sonography & Telecytology
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1-800-838-4268 info@sonopath.com SonoPath.com

**PATIENT**
Frankie Bishop

**SPECIES**
Feline

**BREED**
DSH

**SEX**
MN

**AGE**
17 years

**WEIGHT**
10.2 lbs.

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

**IMAGING PERFORMED BY**
Pamela Harrigan, RDCS

**HOSPITAL NAME**
Norfold County VS

**REFERRING VET**
Chrisina Poor, BVetMed

**INVOICE**
14270

**DATE**
7/7/22

## PRESENTING CLINICAL SIGNS

Presented for unexplained weight loss. CBC/Chem/T4 WNL. No clinical signs at home. Weight April 2021: 16.4 lb; April 2022: 14.6 lb; Now 13.6 lb

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

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 was noted.

The area of the aortic trifurcation was free of pathology.

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. The left kidney measured 4.3 cm in length. The right kidney measured 4.4 cm in length.

### *Adrenal Glands*

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.38 cm width. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.41 cm width.

### *Spleen*

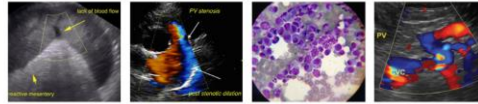
The spleen exhibited overall normal size measuring 0.75 cm width at the level of the hilus. Intermittent subtly expansive mildly hypoechoic splenic nodules were present with an example measuring 0.89 cm In diameter. The nodules appeared to subtly distort the medial splenic capsule.

### *Liver/ Gallbladder*

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 containing primarily anechoic content with very minor particulate luminal debris. The proximal common bile duct was dilated and tortuous. The common bile duct measured 0.25 cm diameter and was not consistent with post hepatic obstruction.

### *Gastrointestinal*

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained moderate variably echogenic yet nonshadowing ingesta most consistent with post prandial presentation without signs of ileus, obstruction or foreign material. No evidence of mechanical pyloric outflow obstruction was noted. The gastric body wall width measured 0.23 cm.





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The small intestine presented intact yet generalized thickened walls owing to a propensity for prominent muscularis and mucosa layer. The duodenum wall measured 0.35 cm width. The jejunum wall measured 0.30 cm width. The ileocolic wall measured 0.35 cm width.

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

### *Pancreas*

The left limb, right limb, and base of the pancreas presented hypoechoic to heterogeneous echogenicity compared to adjacent omental fat. Mild asymmetrical capsule margination was present with mild variable parenchymal swelling and mild peripancreatic reactivity / inflammation. No overt evidence of neoplasia. Mild pancreatic duct dilation was present.

### *Free Abdomen*

Intermittent, mildly prominent jejunocolic lymph nodes were present. These lymph nodes were homogenous, mildly hypoechoic and smoothly marginated. A normal width: length ratio was maintained (<0.5). Evidence of perilymphatic inflammation was evident. An example of lymph node size was 0.25 cm x 1.1 cm. No free fluid was noted.

## ULTRASONOGRAPHIC FINDINGS

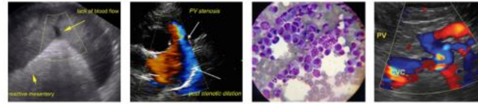
- Mild chronic renal changes
- Nonspecific subtly expansive splenic nodules - Several etiologies possible including hyperplasia, hematopoiesis, and splenitis, with potential for early neoplastic criteria
- Gastric ingesta - suspect post prandial presentation
- Intact yet thickened small bowel walls
- Intermittent nonspecific yet subjectively benign to reactive mildly prominent jejunocolic lymph nodes
- Chronic to chronic active pancreatitis pattern
- Mild nonobstructive proximal common bile duct dilation

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The overall appearance of the small intestine is consistent with infiltrative enteropathy which may include inflammatory vs. neoplastic infiltrative enteropathy i.e., IBD/eosinophilic enteritis vs. lymphoma or other.

The proximal common bile duct dilation may suggest age-related changes or secondary to underlying cholangitis / cholangiohepatitis especially if previous or current liver enzymes elevations have been noted. No overt signs of post hepatic obstruction.

Potential for Triad disease may be possible in this patient. Further assessment may include a GI panel to include PLI/TLI/Cobalamin/Folate. Assessment of hepatic enzymes is suggested if not recently done. A definitive diagnosis would require full-thickness intestinal biopsies.





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Assuming normal clotting status and using a 25-gauge needle, screening splenic FNA for cytology is warranted in light of the patient's weight loss. Three view chest radiographs could be considered to rule out concurrent or occult thoracic pathology as a contributing factor.

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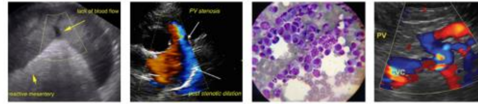

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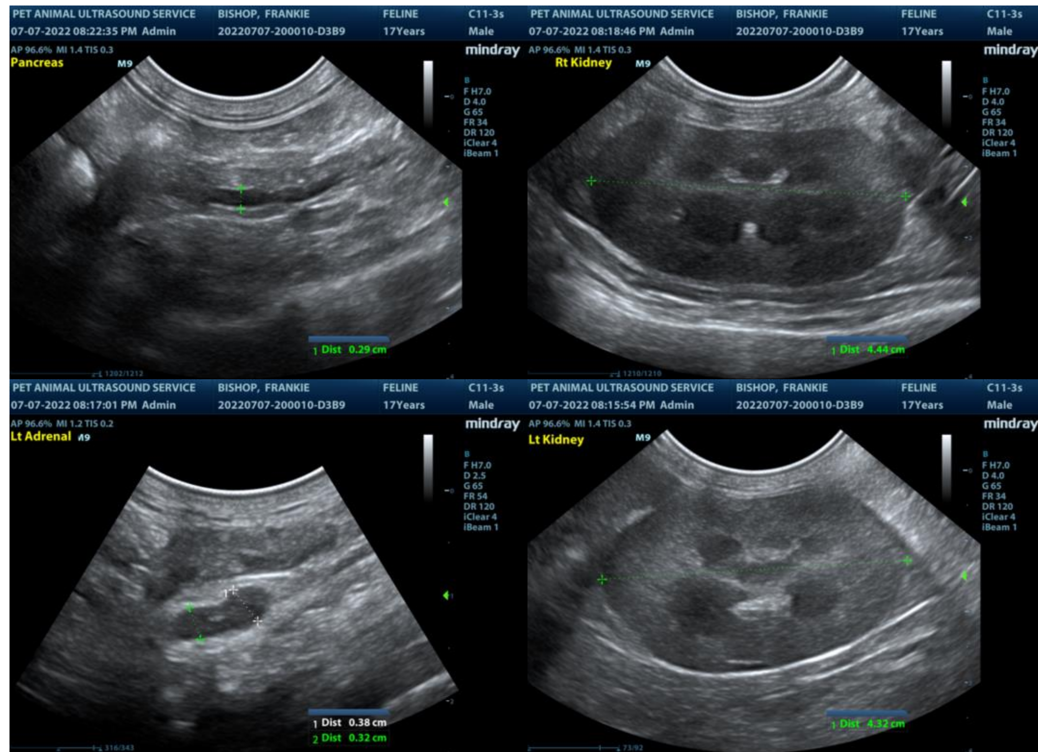


**The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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**