



**PATIENT**

Sitka Mirashrafi

**SPECIES**

Feline

**BREED**

DSH

**SEX**

FS

**AGE**

8yr

**WEIGHT**

10.89lb

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Amanda Crook

**HOSPITAL NAME**

Rivers Edge Pet  
Medical Center

**REFERRING VET**

Dr. Gibson

**INVOICE**

13232ag

**DATE**

03/20/2023

**PRESENTING CLINICAL SIGNS**

Performed 3/1 by previous DVM- slight neutrophilia and monocytosis, Hyperglycemia, Elevated BUN TP Glob, hypokalemia, hyponatremia, hypochloremia Radiographs - 3/17-Digital radiography- gas pattern in colon with odd appearance to feces cranial, thickened intestinal loops diffuse, malposition of gastric axis, odd appearance to splenic region, 3 bb pellets present

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

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 moderate non-dependent sediment. The urinary bladder sediment may suggest cellular / crystalline debris or mucus. Cystocentesis for UA +/- C/S if evidence of inflammatory cells is recommended. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

Normal size and minor asymmetric margination was present in the kidneys. A normal 1:3 cortex / medulla ratio and mild loss of corticomedullary definition was present. 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. A subtle hyperechoic corticomedullary band, consistent with a medullary rim sign, was present. This is a nonspecific finding seen in both normal and abnormal kidneys. It may be associated interstitial renal disease, hypercalcemia, tubular necrosis, lymphoma, and FIP. However, it is a nonspecific finding. The left kidney measured 4.1 cm in length. The right kidney measured 4.3 cm in length.

The area of the aortic trifurcation was free of pathology.

**Adrenal Glands**

The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.47 cm width. No overt pathology in the area of the left adrenal gland.

**Spleen**

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. The spleen measured 0.85 cm in width at the level of the hilus.

**Liver/Gallbladder**

The liver was subjectively normal in size, 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.

**Gastrointestinal**

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained minor retained pyloric fluid with no signs of ileus, obstruction or foreign material.

The small intestine presented segmental variable hypoechoic thickened walls in the mid abdomen consistent with jejunal location. An example of a thickened intestinal wall measured up to 0.40 cm in



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width. By comparison, intact duodenum wall measured 0.25 cm width. Possible segmental mural /muscularis layer proliferation extending into adjacent peri intestinal omentum was present. Associated segmental metabolic to potential mild paralytic ileus within the areas of thickened small intestine was present.

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

## Pancreas

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The pancreas was subtly prominent with asymmetrical contour and heterogeneous to mildly hypoechoic parenchyma compared to adjacent omentum.

## Free Abdomen

## SEX

FS

Intermittent variably sized enlarged mesenteric 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 to peri intestinal hyperechoic inflammation was evident. An example of lymph node size was 1.1 cm in diameter.

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Intermittent scant pocket of peri intestinal free fluid was present.

## ULTRASONOGRAPHIC FINDINGS

- Urinary bladder sediment.
- Bilateral subtle to minor non-specific renal medullary rim sign.
- Variably thickened segmental small bowel exhibiting indistinct wall layer detail and possible segmental mild mural/muscularis layer proliferation.
- Associated variably prominent hypoechoic mesenteric lymphadenopathy and perilymphatic/peri intestinal hyperechoic omentum.
- Possible concurrent low-grade pancreatitis.

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## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The primary finding of the segmental thickened small bowel and associated lymphadenopathy may indicate inflammatory, granulomatous or neoplastic intestinal and lymphatic etiologies. Concern for possible infiltrative intestinal and early neoplastic lymphadenopathy is warranted although not definitive. Full thickness intestinal +/- lymphatic biopsies would be required for a definitive diagnosis. A GI panel to include PLI/TLI/Cobalamin/Folate is recommended.

Empirical IBD/mild pancreatitis protocol with as needed GI support and assessment of clinical response with sonographic monitoring would be reasonable if biopsies are not elected.

## IMAGING PERFORMED BY

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## REFERRING VET

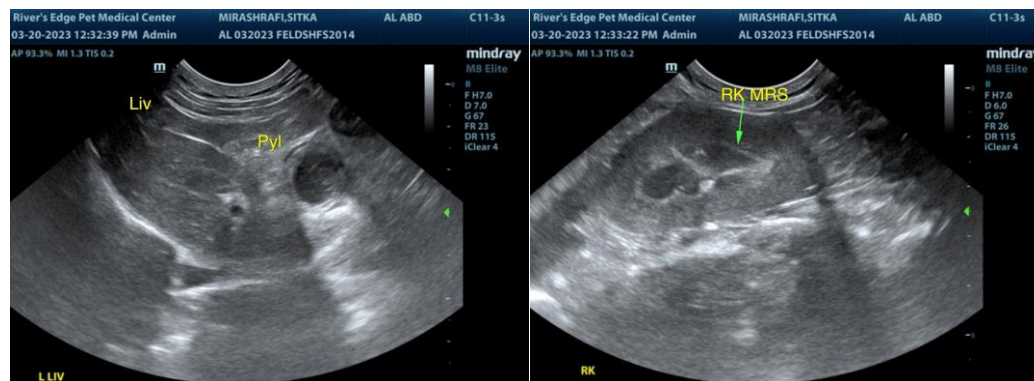
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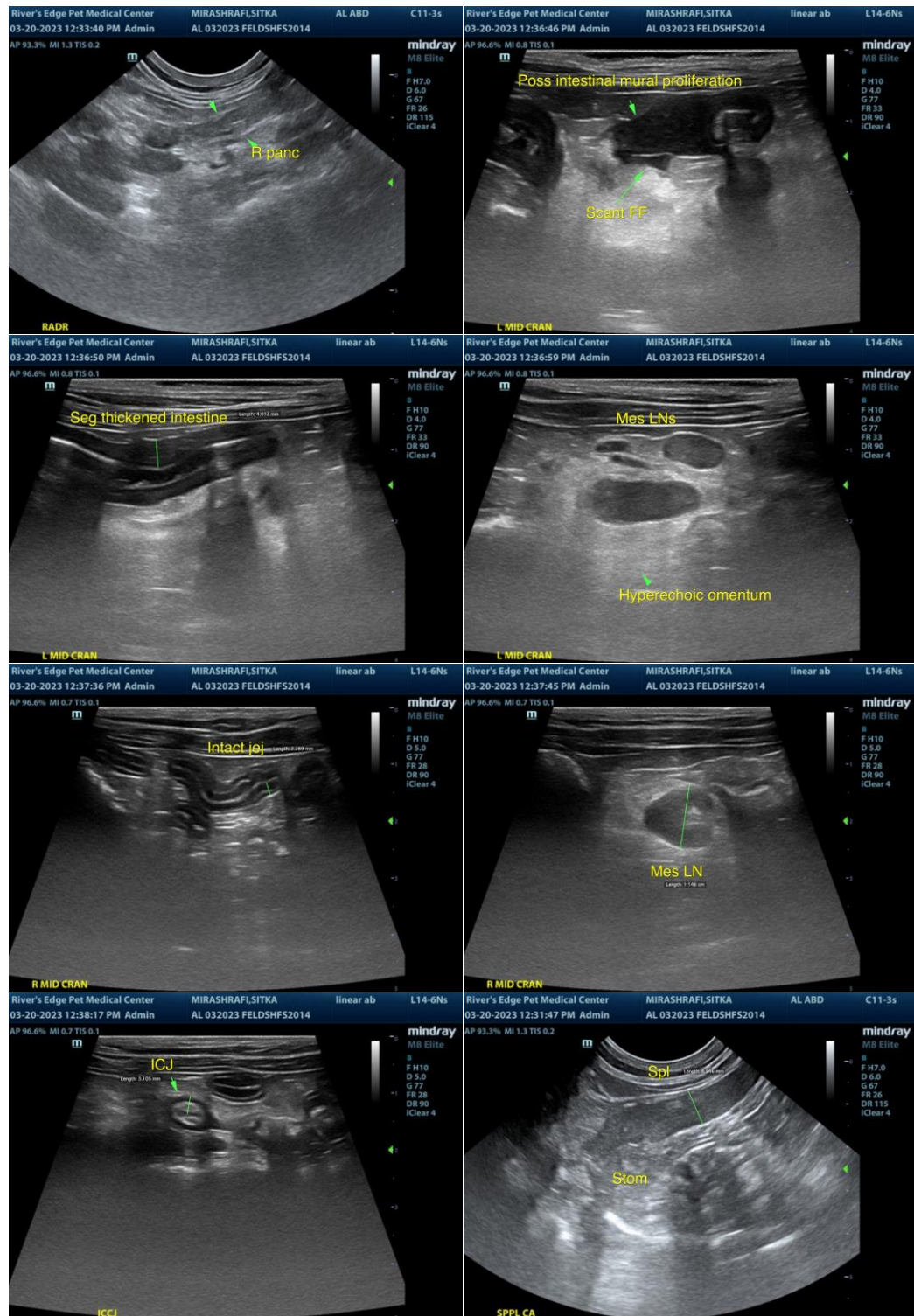
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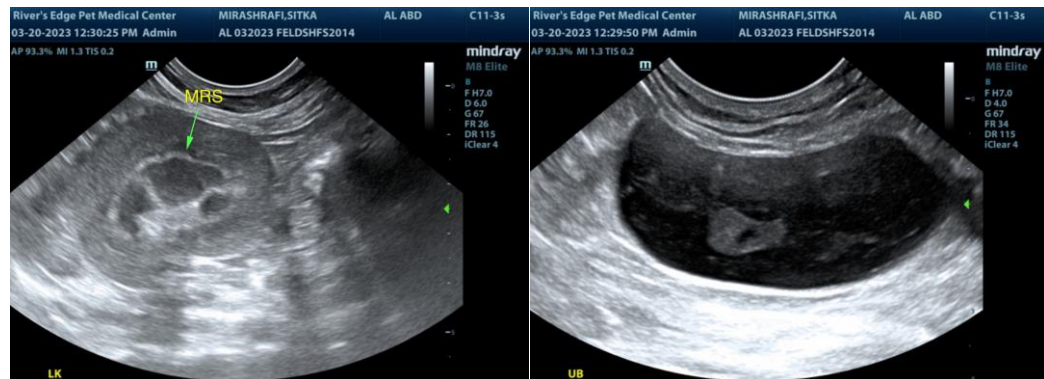
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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)  
[mac.daniel@sonopath.com](mailto:mac.daniel@sonopath.com)