

**DATE PRESENTING CLINICAL SIGNS**

3/2/22 Patient presented for 24 hour history of vomiting, lethargy and inappetence. ~5% dehydration. Mucous membranes pale pink. Diffusely painful on abdominal palpation. Heart and lungs auscultation WNL. Pertinent past medical history: Patient had a circumscribed feline compact type cutaneous mast cell tumor, 1 mitosis figure per 10 high power fields, completely excised removed 5/29/2018.

**PATIENT**

Riley Kosa

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Neutered Male

**AGE**

3/1/11

**WEIGHT**

13.2 Pounds

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**IMAGING PERFORMED BY**

Stephanie Pearce  
RDMS, RVT

**HOSPITAL NAME**

Paradise AH

**REFERRING VET**

Dr. Pound

**INVOICE**

35977

Current Medications: LRS 150mL SQ 3/1/22, Cerenia 10mg/mL 0.6mL SQ 3/1/22, Buprenorphine 0.3mg/mL 0.4mL IM 3/1/22 PM, 0.6mL IM 3/22/22 AM. Gabapentin 100 mg PO 3/1/22 PM and 3/2/22 AM.

Lab results: See attached.

Radiographs: Mid-abdominal mass effect with loss of serosal detail. Scant free fluid in AFAST scan.

Date of Previous IntraPet Ultrasound: no previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: STAT Requested.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The left kidney has a normal shape and size (4.04 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (4.34 cm) Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**Adrenal Glands**

The region of left adrenal (Cranial to left renal artery) is unremarkable but the adrenal is not distinctly visualized. No evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.40 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

**Spleen**

The spleen is large, mottled and irregular. The blood flow through the hilus and splenic parenchyma appears normal. There is a large solid mass effect visualized measuring 5.21 cm x 3.13 cm towards the caudal portion of the spleen. There is some free fluid surrounding the spleen.

**Liver**

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.

### ***Gastrointestinal***

The stomach is dilated with a large amount of fluid. It measures at a normal thickness of <0.36cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layering is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a uniform diameter with minimal fluid distension. Wall thickness is normal to slightly increased. Bowel loops follow a typical curvilinear path with distinct wall layering, but some areas display a prominent muscularis layer which does not display the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measured 0.21 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

### ***Pancreas***

The pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

### ***Free Abdomen***

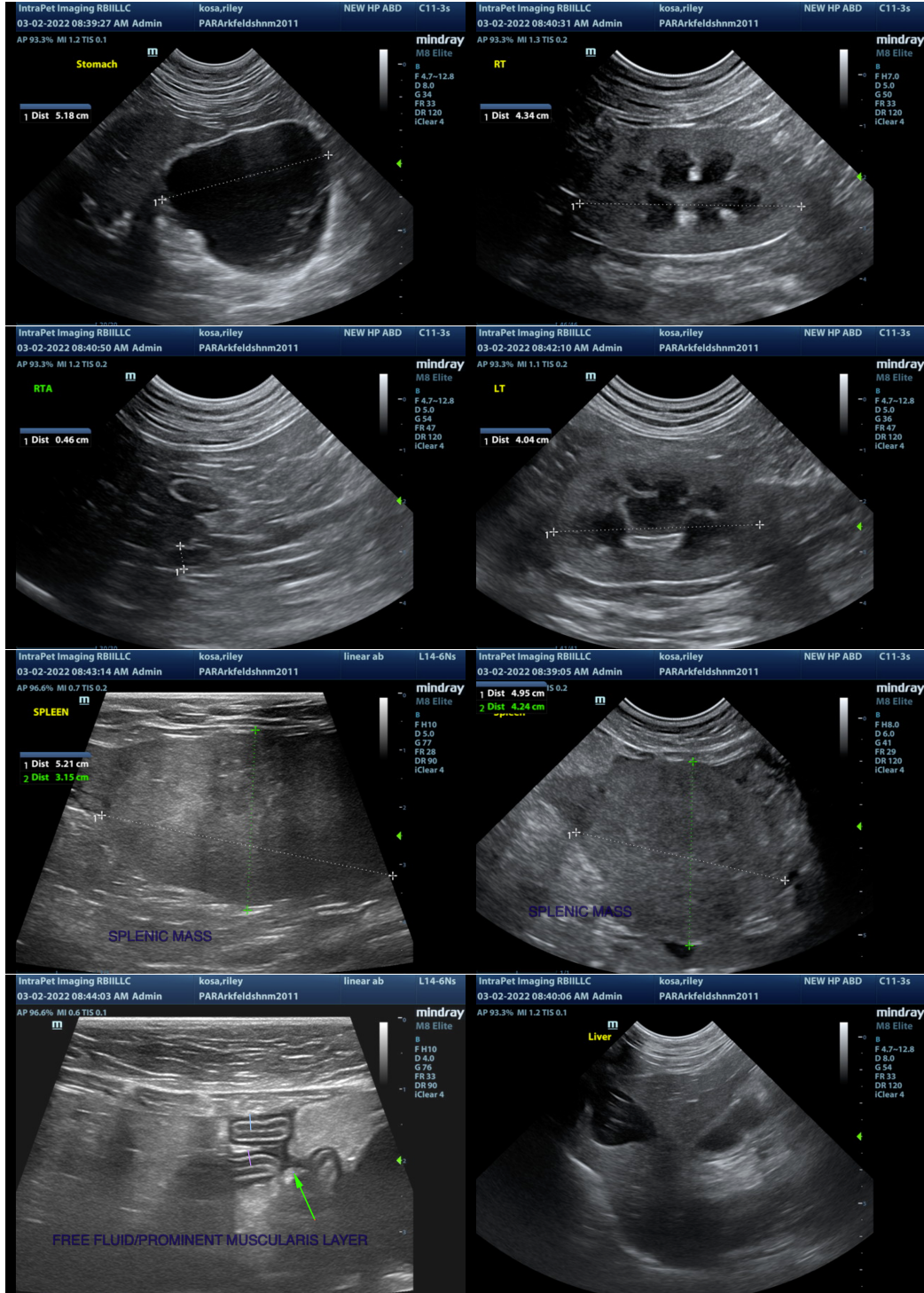
There is a moderate to large amount of free abdominal fluid. No lymphadenomegaly is visualized. The omentum is of increased echogenicity.

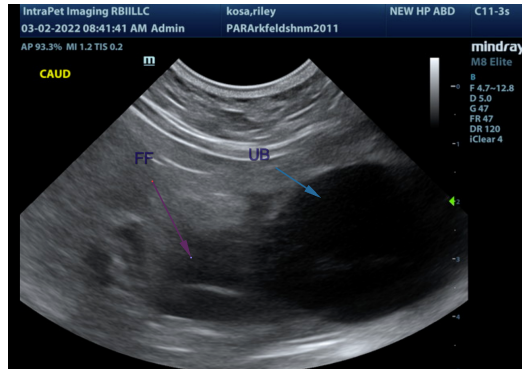
## **ULTRASONOGRAPHIC FINDINGS**

- Large, mottled spleen with a large, solid splenic mass – Findings are most concerning for an underlying neoplastic process. Recommend fine needle aspirate and cytology.
- Prominent muscularis layer of the small intestine – The small intestinal wall changes are most consistent with an inflammatory process (i.e., inflammatory bowel disease) with a low possibility of emerging lymphoma.
- Moderate amount of free abdominal fluid – Recommend sampling and fluid analysis and cytology. This could be consistent with hemorrhage and neoplastic effusion or an inflammatory effusion.
- Significant gastric dilation with fluid – Consider such differentials as gastric ileus, less likely partial gastric outflow obstruction, as no evidence of an obstruction was visualized.

## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

There is a moderate amount of free abdominal fluid and a large splenic mass visualized. Based on the history, mast cell disease would need to be considered. Recommend sampling of the free abdominal fluid, and a fine needle aspirate of the liver and spleen. Depending on the results of these diagnostics, consider consultation with a veterinary oncologist regarding the ideal treatment plan. Recommend pre-medication with antihistamines, anti-inflammatory steroids, and H2 antagonists to try to reduce the likelihood of a degranulation reaction.





**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.

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