

**DATE PRESENTING CLINICAL SIGNS**

2/6/23

**PATIENT**

Jane Hossbach

History: 2020 Had AUS (with IntraPet) here-- IBD vs lymphoma. Had short course of pred and has been on z/d diet since. overall doing well, occasional flares Has been vomiting more frequently, worse for 3 days, not eating much, possible trouble breathing Had full labs in November, according to the email sent to owner by text-- renal/liver /T4 /SDMA /other all wnl Did see protein in urine, and low platelets( suspected clumping) . Was going to consider bp Have not had recheck yet

**SPECIES**

Feline

Current Medications: gabapentin, maropitant, protonix, Vitamin B12.

Lab Results: See attached.

Radiographs: SI thickened chest clear

**BREED**

DSH

Date of Previous IntraPet Ultrasound: 8/14/20. See attached.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Andi Parkinson, BS, RDMS.

**SEX**

Spayed Female

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****AGE**

8/11/06

**Urinary System**

Urinary bladder is adequately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

**WEIGHT**

7.2 Pounds

Kidneys are overall normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of pyelectasia, mineral or infarcts observed. The left kidney measures 3.87 cm. The right kidney measures 3.64 cm.

**INTERPRETED BY**Beth Johnson, DVM  
DACVIM**Adrenal Glands**

Left adrenal gland is normal in size (0.52 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**HOSPITAL NAME**Animal Emergency  
Hospital

Right adrenal gland is normal in size (0.47 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**Spleen**

Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

**REFERRING VET**

Dr. King

**Liver**

Liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

**INVOICE**

21038

Gallbladder is moderately distended with anechoic bile as well as very mild suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

### ***Gastrointestinal***

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestine demonstrates areas of thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). Small intestinal submucosa is slightly irregular, thick and hyperechoic, without evident loss of layering appreciated. The lumen of the small intestine is empty with no evidence of obstruction or foreign material.

The visible colon is normal in wall thickness and layering. Contents are consistent with normal formed feces and gas.

### ***Pancreas***

The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

### ***Free Abdomen***

There is no evidence of peritoneal effusion. The mesenteric lymph nodes are prominent in size with swollen capsular contour. Normal elongated shape (length to width ratio) is maintained. There is no loss of parenchymal detail.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

- Inflammatory bowel disease (IBD) pattern – Thick muscularis has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma. No aggressive lymphadenopathy, loss of layering, etc. is noted to make lymphoma more probable, but lymphoma cannot be definitively ruled out without tissue sampling.
- Reactive mesenteric lymph nodes – infiltrative neoplastic disease cannot be ruled out but is considered less likely.

### **Secondary Findings**

- Age-related kidney changes
- Very mild gallbladder debris – Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness, however, it can also be associated with hepatobiliary disease in cats and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

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

Overall, these images don't provide an explanation for this patient's acute progression of previously diagnosed or suspected inflammatory bowel disease vs gastrointestinal lymphoma.

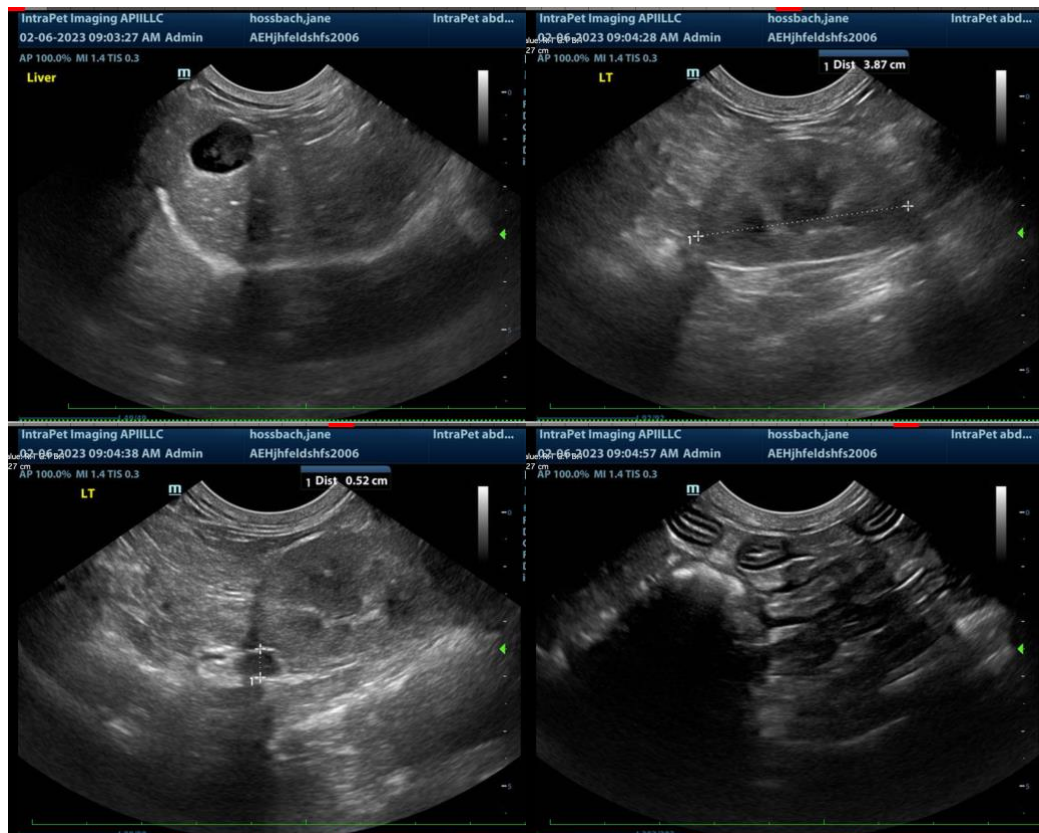
Given the history of proteinuria, a urine protein to creatinine ratio is recommended if not recently evaluated.

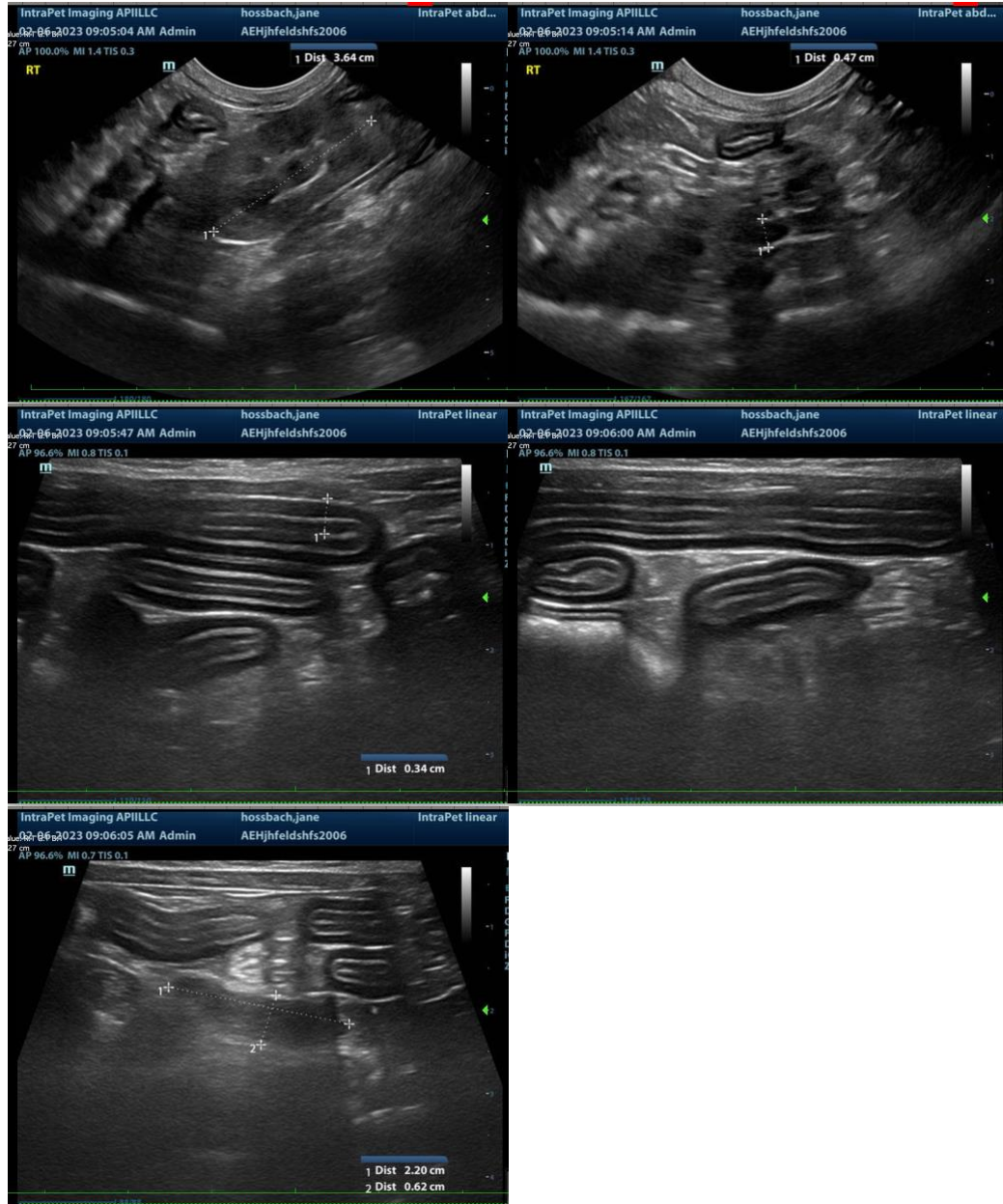
Additionally, further evaluation for possible secondary or underlying parasitic or infectious contributing factors to the gastrointestinal disease is recommended with a fecal exam and a fecal enteropathogen PCR panel to Texas A&M GI Laboratory, for further evaluation of possible infectious disease.

In the meantime, some patients stop responding to a current diet or respond better to a different brand of a hydrolyzed protein diet, so, if tolerated, a transition to a different brand could be considered.

A probiotic, such as Visbiome or Provable could be considered, as could empirical deworming with a 5-day course of Panacur.

Ultimately, gastrointestinal biopsies may be necessary to definitively diagnose and therefore guide management of the bowel disease, or if biopsies are not an option, restarting the previously prescribed prednisone may be necessary if there are no contraindications or comorbidities to doing so.





The information and recommendations provided are based on the images presented by the referring veterinarian. 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.

**Beth Johnson, DVM DACVIM**  
Beth.Johnson@SonoPath.com

