

**DATE PRESENTING CLINICAL SIGNS**

2/9/2022 History: Chronic diarrhea, inappetence, eructations, whining -- going on for several months. Stool improved with medications and diet change, but still having repeated bouts of inappetence

**PATIENT**

Mr Scorpio Epperson

Current Medications: Trazodone 100 mg -- 3 tabs PO the night before and 3 tabs PO two hours before his appointment. Started on 12/2: Provable -- 1 cap PO SID. Started on 1/18/22: Metronidazole 500 mg -- 1 tab PO BID #10, Cobalequin for dogs > 22 lb -1 tab PO SID (bottle)

Lab Results: 12/3/21: Attached separately. CBC/Chem/T4/Spec cPL: NSF, Fecal: neg.

**SPECIES**

Canine

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

**BREED**

German Shepherd

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****SEX**

Male Neutered

**Urinary System**

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

**AGE**

4-2-2014

The prostate is normal in size (1.08 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

**WEIGHT**

82.2 Lbs.

The left kidney is normal size ((8.40 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

Andrea Nicastro, DMV,  
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(Small Animal  
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The right kidney is normal size (7.41 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**HOSPITAL NAME**

Paradise Animal  
Hospital

**Adrenal Glands**

The left adrenal gland is normal size (0.57 cm at cranial pole) (0.61 cm at caudal pole) (2.51 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**REFERRING VET**

Dr. Twardzik

The right adrenal gland is normal size (0.72 cm at cranial pole) (0.81 cm at caudal pole) (2.86 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**INVOICE**

10302

**Spleen**

The spleen is subjectively enlarged/elongated, with a folded contour and normal curvilinear peripheral margins. The parenchyma is slightly mottled in appearance. A 2.41 x 1.23 cm irregular multi-septated cystic nodule/mass is observed at the medial aspect. Splenic vasculature appears normal no evidence of thrombosis.

### **Liver**

The liver is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed.

The gall bladder lumen is moderately distended. The wall is thin and smooth. Luminal contents are anechoic. The cystic and common bile ducts are normal.

### **Gastrointestinal**

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive or overt infiltrative disease is noted.

### **Pancreas**

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely hyperechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

### **Free Abdomen**

There is no evidence of free fluid. The abdominal lymph nodes are normal/not visible.

### **Other**

A brief echocardiogram reveals no evidence of pericardial effusion or obvious right atrial/auricular mass.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

- The diffuse splenic parenchyma changes could be consistent with a benign process such as lymphoid hyperplasia or extramedullary hematopoiesis. Alternatively, emerging neoplasia (i.e., lymphoma), is possible. The cystic nodule/mass could be consistent with an emerging tumor (i.e., hemangiosarcoma, hemangioma) or benign a benign cystic lesion.

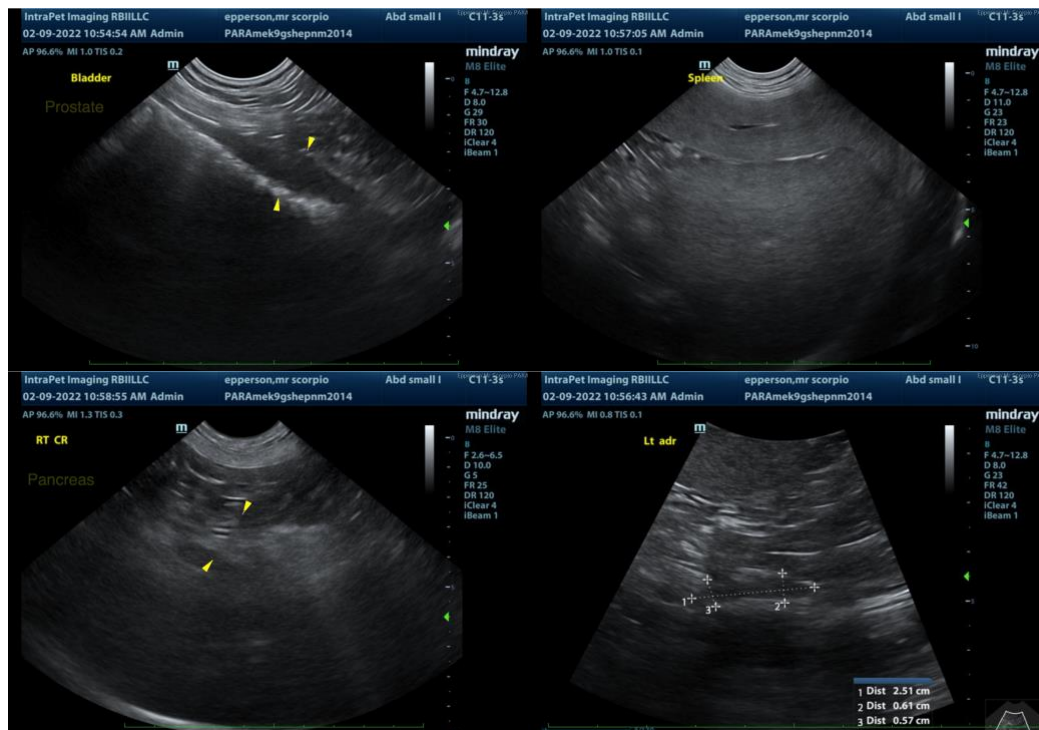
### **Secondary Findings**

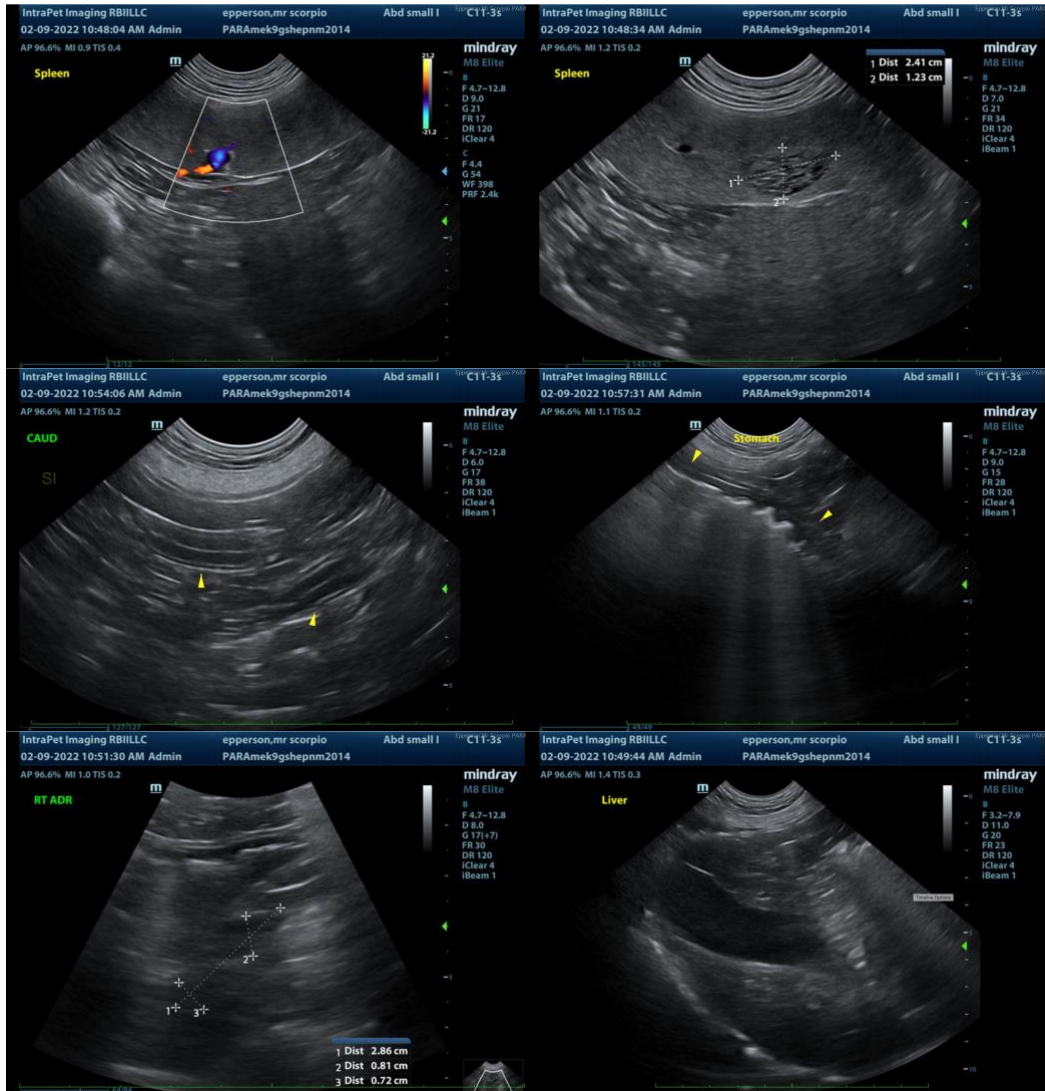
- Age-related pancreatic remodeling +/- fibrosis. Low-grade pancreatitis is also possible particularly if the patient exhibits discomfort on cranial abdomen palpation.
- Minor age-related renal changes

\*\*\* An obvious cause for the patient's chronic GI signs is not identified in this study. Differentials include underlying metabolic disease, primary gastrointestinal disease (i.e., intestinal dysbiosis, infectious/parasitic, food allergy, inflammatory bowel disease), low-grade pancreatitis, other.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- A malabsorption panel including serum cobalamin, folate, TLI, and PLI is recommended
- A resting cortisol level to screen for hypoadrenocorticism. If resting cortisol level is < 2.0 mcg/dL, an ACTH stimulation test is recommended.
- Despite the negative fecal evaluation, consider prophylactic deworming with Fenbendazole.
- Consider empirical treatment for small intestinal bacterial overgrowth with Tylosin (if Metronidazole is ineffective in controlling the diarrhea).
- Six-week limited antigen diet trial.
- Depending on the results of the above diagnostics, GI biopsies (i.e., endoscopic or surgical), may be necessary to get a definitive diagnosis. If biopsies are pursued, three-view thoracic radiographs should be performed prior to anesthesia.
- Regarding the splenic nodule/mass, consider a splenectomy with submission of the spleen for histopathology. If surgery is pursued, GI biopsies should also be obtained. If a more conservative approach is desired, a recheck ultrasound is recommended in a month to assess for progression.





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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