

**DATE PRESENTING CLINICAL SIGNS**

3/9/23

**PATIENT**

Zeus Fairall

History: Unexplained weight loss, polydipsia, ravenous appetite that has worsened over the past few months; initial wt loss was intentional d/t increased BCS, however over the past 6 months O has noticed these clinical signs w/ no change in diet/environment/activity, etc; Hx of ehrlichia positive on 4dx in 2021, treated w/ doxycycline x28d, snap test remains positive, BW otherwise unremarkable; O opts for AUS to screen for additional pathology that could contribute to unexplained wt loss-- r/o neoplasia v other

**SPECIES**

Canine

Current Medications: Simplicef.

Lab Results: See attached.

Date of Previous IntraPet Ultrasound: No previous.

**BREED**

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Labrador Retriever

Imaging Performed By: Stephanie Warga RDCS, RVT.

**SEX**

Neutered Male

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

2/11/11

**Urinary System**

The urinary bladder is moderately distended with anechoic urine. The bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2.0 cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

**WEIGHT**

67 Pounds

The prostate is normal in size (0.85 cm) and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

**INTERPRETED BY**

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

The left kidney has a normal shape and size (6.42 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 hydronephrosis. Renal vasculature is normal.

The right kidney has a normal shape and size (6.13 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 hydronephrosis. Renal vasculature is normal.

**HOSPITAL NAME**

Bayside AMC

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.75 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

**REFERRING VET**

Dr. Beigel

The right adrenal gland is normal in size measuring 0.61 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.

**INVOICE**

21535

**Spleen**

The spleen is borderline large in size. The spleen echotexture is heterogenous and mottled, the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. There are numerous small hyperechoic foci throughout the splenic parenchyma. Additionally, there are some larger irregular hyperechoic lesions, one such lesion visualized measures 1.76 cm in diameter.

### **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. There is a hyperechoic nodule/mass effect visualized in the right cranial aspect of the liver, measuring 3.18 cm x 2.09 cm.

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

### **Gastrointestinal**

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7 cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers 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 relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. The duodenum measured as normal (0.45 cm in wall thickness) and the jejunum measured as normal (0.38 cm) Visualized peristalsis appears appropriate. No focal lesions are visualized but there is a mild amount of fluid visualized in the duodenum.

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 scant free abdominal fluid. No lymphadenopathy is noted. The omentum is normal in echogenicity.

### **Other**

The right auricle and pericardium were visualized and were unremarkable. No obvious pathology is visualized. If cardiac function evaluation is desired a full echocardiogram is warranted.

## **ULTRASONOGRAPHIC FINDINGS**

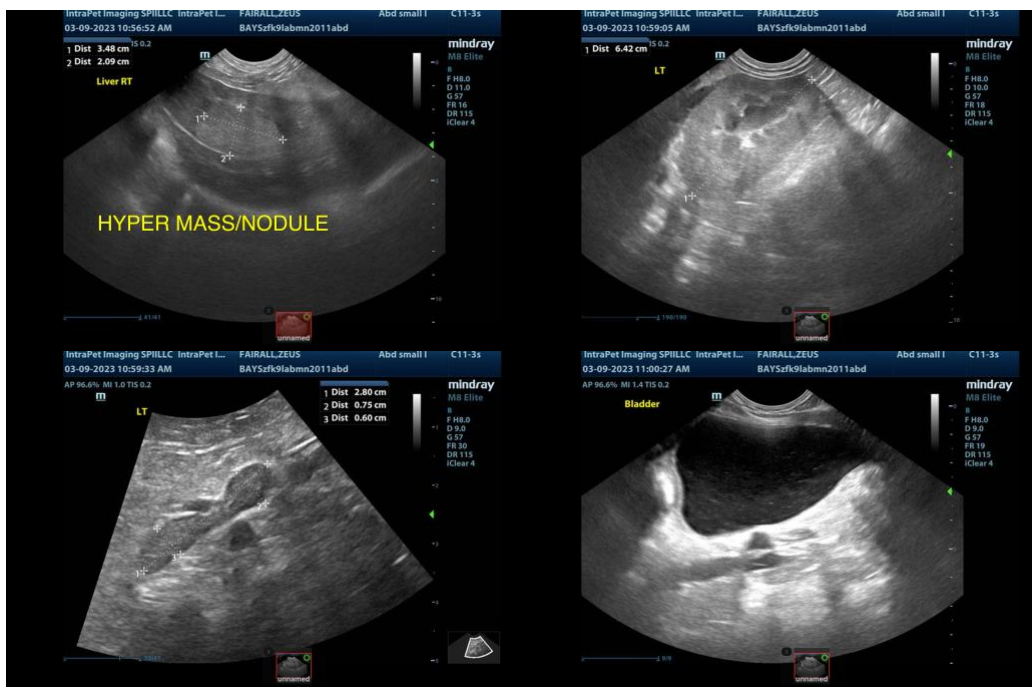
- Mottled spleen with numerous hyperechoic foci/nodules. The diffuse splenic changes are non-specific and could be consistent with lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis. Most of the hyperechoic lesions have the characteristics of benign myelolipoma-like lesions. Some of the larger irregular hyperechoic lesions possibly deviate the splenic capsule. I recommend a fine needle aspirate.
- Hyperechoic nodule/mass effect in the liver. This could represent a benign or neoplastic lesion. Subjectively, it does not have many criteria for malignancy. If an appropriate window can be obtained, consider a fine needle aspirate.

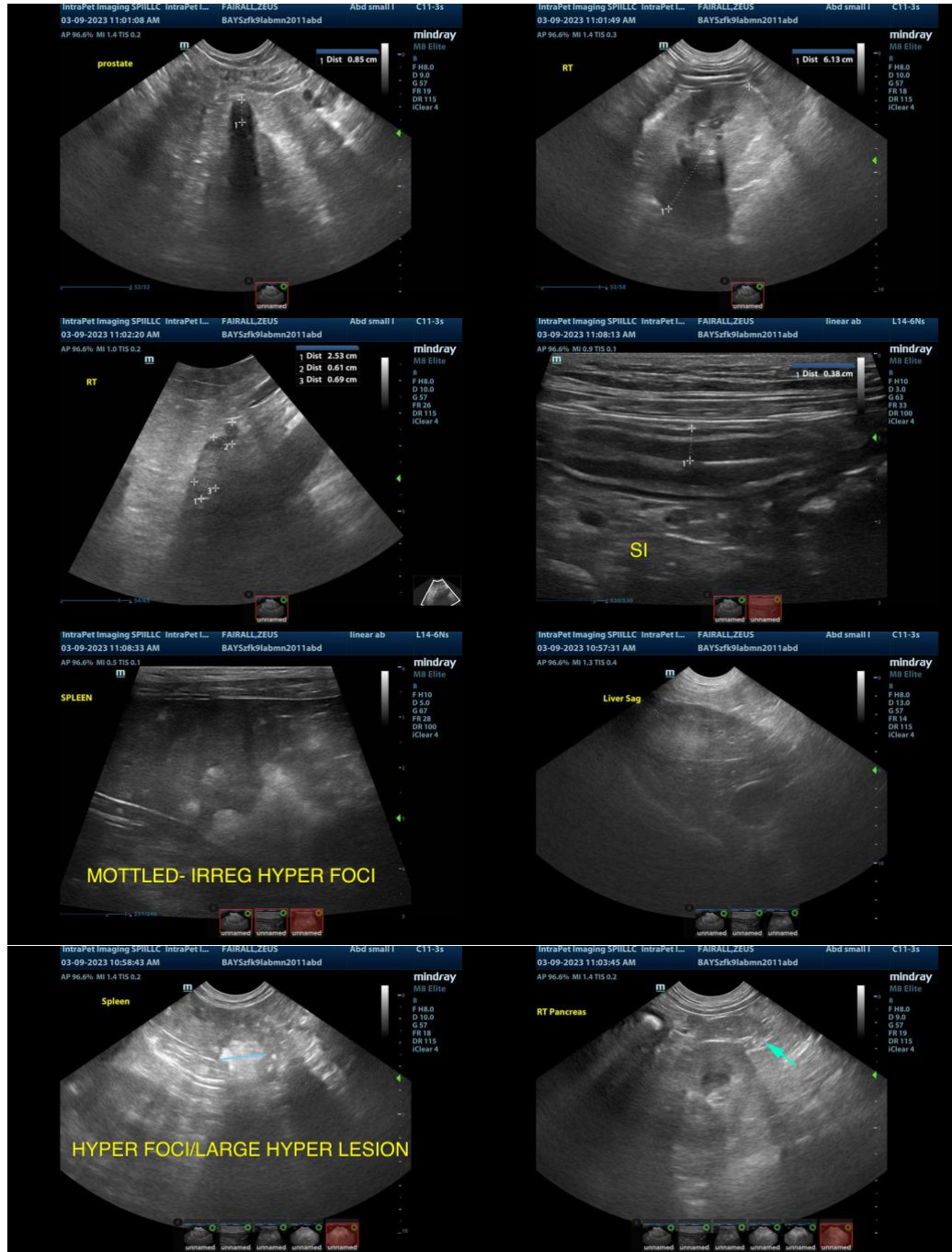
- Moderate gallbladder debris. The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting but seems unlikely to be causing a current issue. Recommend continued monitoring.
- Scant free abdominal fluid

### INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The significance of the lesions described on today's exam are somewhat questionable. I recommend a fine needle aspirate of the spleen to further evaluate the mottling and hyperechoic lesions, but they, very likely, are benign in nature. Additionally, there is a large hyperechoic nodule in the liver. This could represent a benign or an early neoplastic lesion, but I suspect it's unrelated to the symptoms described on today's exam.

I would consider quantitating water intake, as the urinalysis provided has a concentrated urine sample. Additionally, I would evaluate the type and volume of food being fed to make sure this is not an issue. Based on the scant free abdominal fluid, I am concerned that there could be something going on in the abdomen, but if cytology of the spleen is normal, the cause of these symptoms is questionable at this time. I recommend three view thoracic radiographs, close continued monitoring, and possibly repeat imaging if symptoms persist. If the patient is truly PU/PD, then consider urinalysis, culture, and screening for Leptospirosis.





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.

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