

**DATE PRESENTING CLINICAL SIGNS**

4/26/22

P has been E/D normally, but has lost significant muscle mass abdomen appears slightly distended, no v/d, excessive coughing. Distended abdomen, no fluid wave. Splenic and liver enlargement.

**PATIENT**

Gojira Testerman

Recommend abd ultrasound and echocardiogram/thoracic ultrasound.  
RX lasix, hydrocodone to control symptoms.

**SPECIES**

Canine

Current Medications: Metronidazole, Furosemide, and Hydrocodone.

Lab Results: See attached.

Radiographs: R lateral abd rad - splenic and hepatic enlargement, caudally displaced gastric axis, grade 4-5/6 ejection murmur

**BREED**

Boxer

possible arrhythmia. R lateral thoracic radiograph - large heart base tumor with dorsal tracheal displacement, pulmonary edema

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Declined.

**SEX**

Neutered Male

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

12/5/12

**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.

**WEIGHT**

61.2 Pounds

The prostate is normal in size (1.3 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 (7.32 cm) with a small cortical cyst at 0.94 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.

**IMAGING PERFORMED BY**

Stephanie Pearce  
RDMS, RVT

The right kidney has a normal shape and size (7.13 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 hydroureter. Renal vasculature is normal.

**HOSPITAL NAME**

Festival Vet Clinic

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.73 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. Ullman

The region of the right adrenal (between right cranial kidney and vena cava) is unremarkable, but the adrenal is not distinctly visualized. No evidence of a mass effect.

**INVOICE**

37154

**Spleen**

The spleen is small 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. No focal parenchymal abnormalities are visualized.

### **Liver**

The liver is large in size, and normal in echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The vasculature appears prominent and appears dilated. 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 contains minimal luminal contents. It measures at a normal thickness of <0.7cm 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.

Most of 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. Jejunum wall measured 0.29 cm. Visualized peristalsis appears appropriate. In the caudal abdomen, there are several mildly fluid distended bowel loops with what appears to be non-shadowing intraluminal material, most consistent with possible passing ingesta.

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 prominent and mottled compared to the surrounding isoechoic 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 amount of free abdominal fluid. There is a mild mesenteric lymphadenopathy with mesenteric lymph nodes near the root of the mesentery measuring 0.81, 0.82, 0.77 cm. Mesentery is mildly increased in echogenicity.

## **PRIMARY FINDINGS**

- Large, heterogeneous liver with dilated vasculature – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy. The dilated vasculature could be consistent with congestion, heart disease, a vascular obstruction, etc.
- Small, mottled spleen – 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. The spleen appears somewhat small and possibly hypovolemic.
- Mildly fluid dilated small intestine with intraluminal, non-shadowing material – findings could be consistent with passing ingesta. No evidence of an obstruction is visualized, but continued monitoring is warranted.
- Free abdominal fluid

- Mild mesenteric lymphadenopathy – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

## SECONDARY FINDINGS

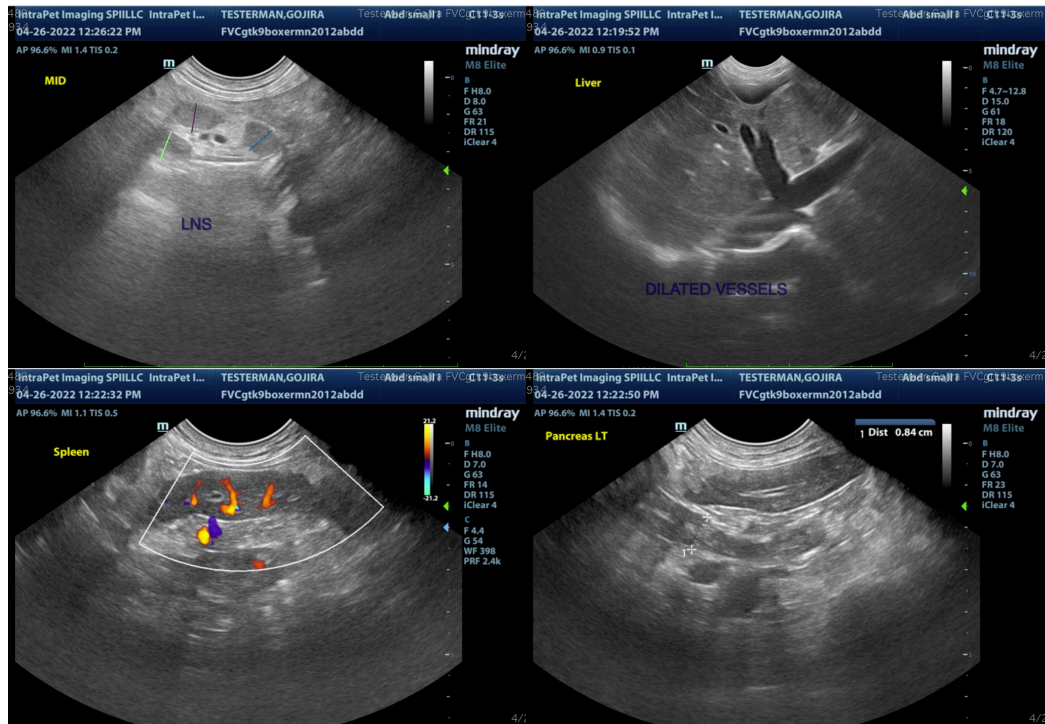
- Prominent, mottled pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

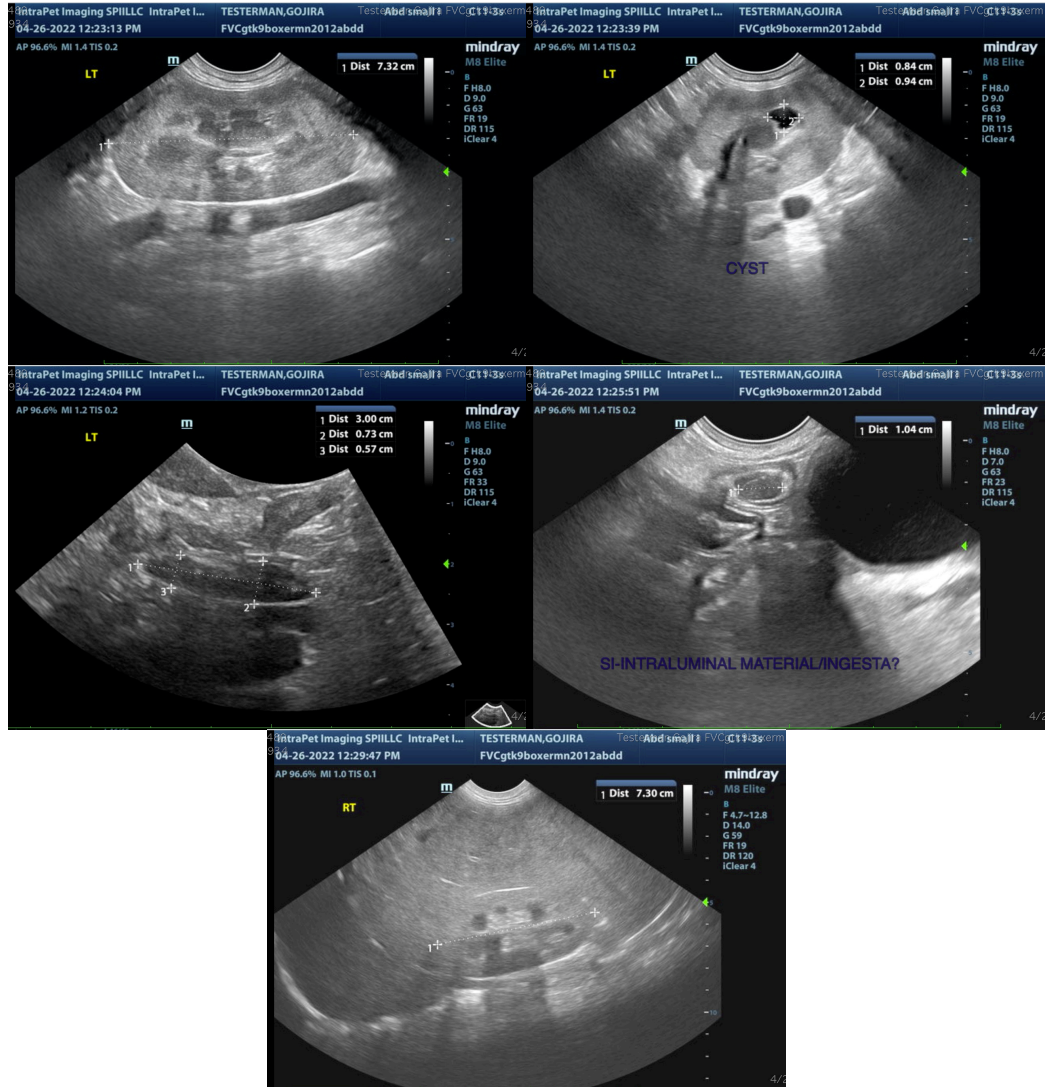
## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The liver is large and heterogeneous with dilated vasculature. This could be consistent with congestion. Consider a cardiac ultrasound (one is pending) and/or evaluation for a mass lesion causing congestion.

The significance of the small, mottled spleen is uncertain. Recommend rehydration if the patient is clinically dehydrated, and reevaluation +/- fine needle aspirate.

The significance of the mildly fluid dilated small intestine is unclear. The material visualized within the small intestine does not appear to shadow, so it is likely consistent with ingesta, and unlikely to represent foreign material.





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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