

**DATE PRESENTING CLINICAL SIGNS**

3/29/23

2/28/23 vomiting frequently, mostly bile, weight loss (weight= 11.3 pounds this day). CBC, GHP, T4 WNL. 3/9/23 vomiting continues. drinking more. 4.5/9 BCS. uncomfortable on abdominal palpation. less enthused w/ food in past week. (weight = 11.2 pounds). o gave 3-4 doses of pred (dose?). 3/28/23 Weight is 10.5 pounds. Pet still vomiting. Maldigestion profile pending.

**PATIENT**

Elsie Pearl

**SPECIES**

Feline

**BREED**

Maine Coon X

**SEX**

Spayed Female

**AGE**

10/1/11

**WEIGHT**

10.5 Pounds

**INTERPRETED BY**

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

**HOSPITAL NAME**

Jacksonville VH

**REFERRING VET**

Dr. Larsson

**INVOICE**

46251

Current Medications: 3/9 o had been giving 3-4 oral doses of pred (dose?); we gave 120ml LRS SQ; 0.53mL Cerenia SQ; enema; miralax/lactulose recommended, 0.2ml Dex SP SQ (2mg/ml)  
Radiographs: 3/9/23 rad: large amount of firm stool in abdomen/ p uncomfortable on palpation.  
Date of Previous IntraPet Ultrasound: No previous.  
Sedation: Not required to complete full diagnostic ultrasound.  
Stat Report: Not requested.  
Imaging Performed By: Rachel Brillhart, RDMS.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System**

The urinary bladder is moderately distended with mild primarily suspended echogenic debris present. 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 calculi. Echogenic debris of this type can be associated with small crystals, cellular debris and proteinaceous debris.

The left kidney has a normal shape and size (3.76 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal in size (3.28 cm) but slightly irregular with a hyperechoic region in the cranial pole, most consistent with a previous infarct. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths or hydroureter. Renal vasculature is normal.

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.32 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.

The right adrenal gland is normal in size measuring 0.39 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 subjectively normal in size (1.3 cm in height at the level of the hilus), echotexture is homogenous, and 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 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 mild and 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 <0.36cm 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 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 measures 0.34 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 right and left limbs of the pancreas are prominent and hypoechoic as 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***

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

## **ULTRASONOGRAPHIC FINDINGS**

- Mildly echogenic debris visualized in the urinary bladder – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus.
- Hypoechoic prominent left and right limb of the pancreas with mild surrounding hyperechoic mesentery – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Mildly decreased corticomedullary distinction in both kidneys with a right-sided renal infarct – The bilateral renal findings are consistent with age-related change. The solitary renal lesion identified is ill defined and hyperechoic, this could be consistent with a previous renal infarct and can be an indicator of current or previous renal disease.
- Prominent muscularis layer of the small intestine – The small intestinal wall changes could be consistent with an underlying inflammatory process. These types of changes can sometimes be seen in normal older cats. Correlate with clinical signs.

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

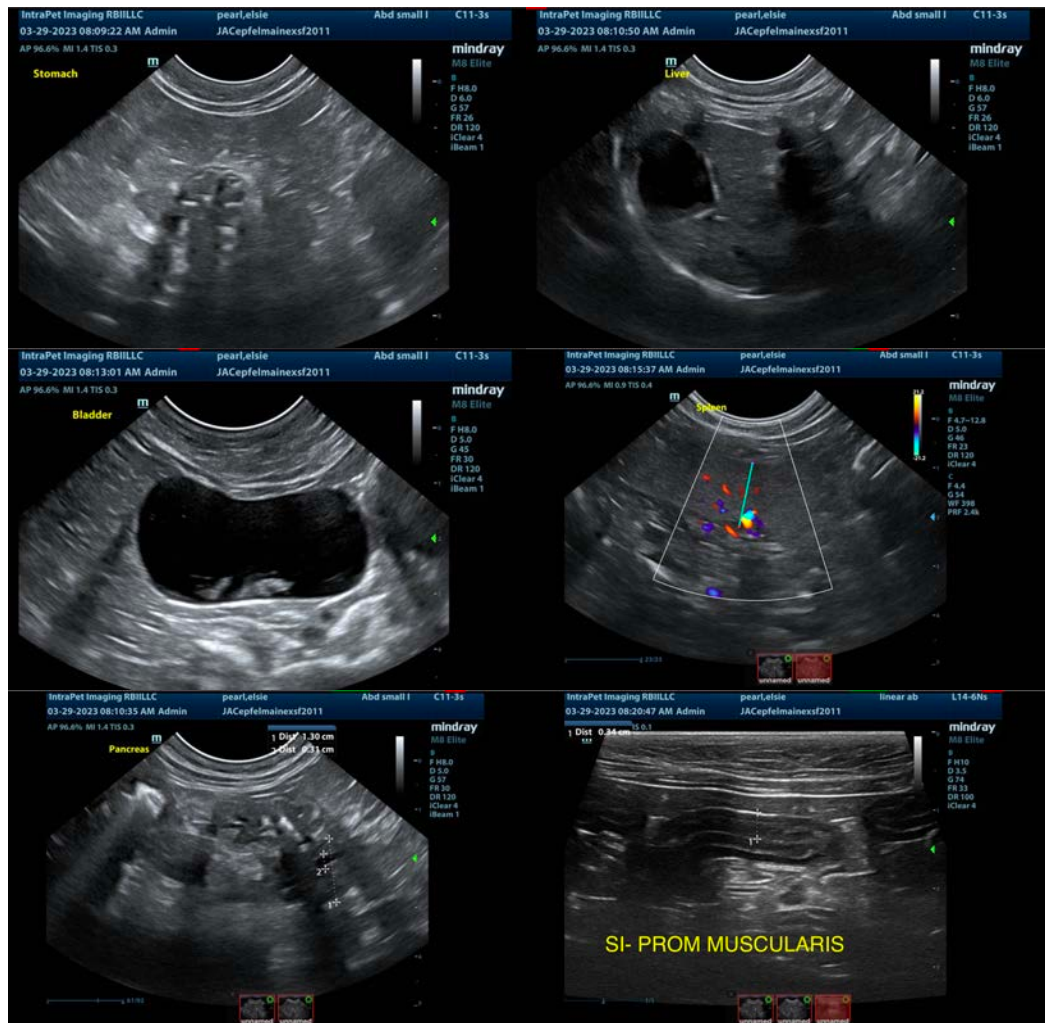
The pancreas appears somewhat hypoechoic with mildly hyperechoic surrounding mesentery. This is seen in both limbs and could be consistent with mild active pancreatitis or a previous episode of pancreatic inflammation. Correlate these findings with a quantitative fPLI level and consider empirical treatment for pancreatitis. Additionally, the muscularis layer of the small intestine is somewhat prominent. This can be a

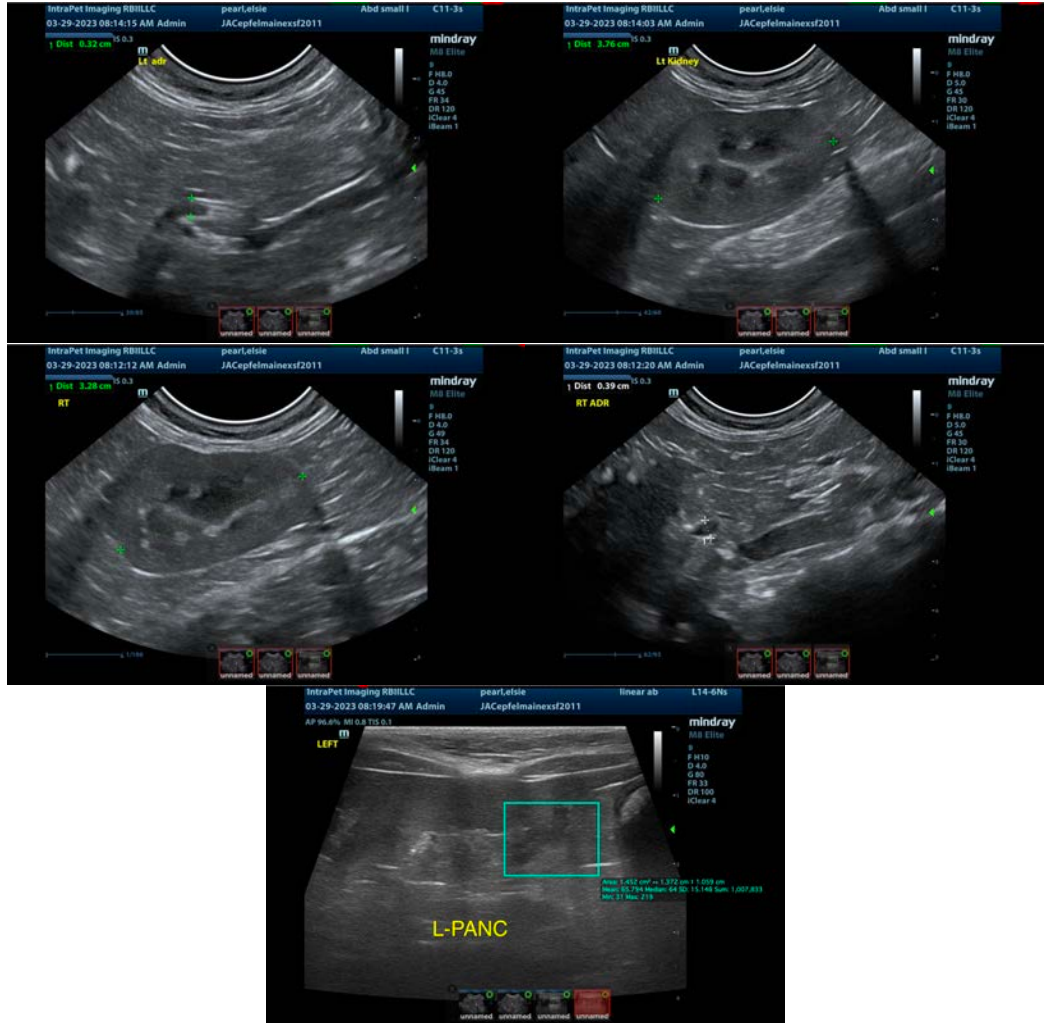
normal finding in some older cats but can also be associated with underlying gastrointestinal disease.

Consider such differentials as food allergy/dietary intolerance, GI parasitism, chronic pancreatitis, IBD and less likely neoplasia, etc..

- Consider a novel protein/hydrolyzed protein diet (exclusively at least 4-6 weeks)
- Consider a GI panel to Texas A&M for evaluation of B12 levels, folate, PLI/TLI etc.. to further evaluate for pancreatic/small intestinal disease.
- Recommend chronic probiotic therapy.
- If making these changes and treatment for acute pancreatitis does not improve the symptoms described, and primary gastrointestinal disease is thought likely, then consider obtaining GI biopsies.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.





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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