

**DATE PRESENTING CLINICAL SIGNS**

5/18/22

Pet presented 5/16 for first visit for several week history of ADR and decreased appetite. Pet was adopted several years prior but no veterinary history since. QAR 7-10% dehydrated, Wt: 4.16 kg BCS: 4/9  
 Eyes: Grossly appropriate. Ears: Unremarkable. Nasal and Oral Cavity: No nasal discharge. Dental Calc 4/4  
 Severe dental disease. PLN: WNL.

**PATIENT**

Bagheera Venugopal

Heart/Lungs: 3/6 parasternal murmur. pulses strong and synchronous. Eupneic, lungs clear. Abdomen: soft, non-painful. No palpable masses. Bilaterally small kidneys. U/G: normal external genitalia. No discharge.  
 Musculoskeletal: Generalized muscle wasting, Integument: Grossly normal. Neuro: Appropriate mentation.  
 Full neurologic exam not performed. Rectal: Not performed.

**SPECIES**

Feline

Current Medications: None.

**BREED**

Lab Results: Chemistry: Precision PSL 116 (8 -26). CBC: neutrophils at 10,112, lymphocytes low at 1152, Eosinophils high at 1024. UA: S.G. 1.016, trace protein, pH 6.0, inactive sediment.

DSH

Date of Previous IntraPet Ultrasound: No previous.

**SEX**

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Neutered Male

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

5/17/06

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**

4.16 kg

The left kidney has a normal shape and size (3.7 cm) with mild pyelectasia at 0.13 cm. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

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

The right kidney has a normal shape and size (4.19 cm) with mild pyelectasia at 0.16 cm. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**IMAGING PERFORMED BY**

Rachel Brillhart RDMS

**Adrenal Glands**

The region of left adrenal (Cranial to left renal artery) is unremarkable but the adrenal is not distinctly visualized. No evidence of a mass effect.

**HOSPITAL NAME**

Banfield Towson

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.

**REFERRING VET**

Dr. Lewis

**Spleen**

The spleen is subjectively normal in size, 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.

**INVOICE**

37731

**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 primarily anechoic. The cystic and common bile ducts are normal/not visible.

### **Gastrointestinal**

The stomach is dilated with a large amount of fluid and irregular shadowing material most consistent with normal ingesta and gas. 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 layering 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 moderate diffuse distension with chyme and fluid. 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 measured 0.24 cm. Duodenum wall measured 0.31 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 non-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**

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There is a significant mesenteric lymphadenopathy in the area of the mesenteric root with hypoechoic, rounded lymph nodes measuring 0.59 cm and 0.77 cm. The omentum is of increased echogenicity around the enlarged lymph nodes.

## **PRIMARY FINDINGS**

- Large, hypoechoic, irregular pancreas with surrounding inflammation – The pancreatic changes are most consistent with moderate pancreatitis/pancreatic inflammation. Recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider fine needle aspirate if not improving.
- Large amount of shadowing material and fluid within the gastric lumen – Correlate with feedings history and abdominal radiographs. If adequately fasted then consider such differentials as delayed gastric emptying or a partial outflow tract obstruction (none visualized).
- Prominent muscularis layer to the small intestine – The small intestinal wall changes are most consistent with an inflammatory process (i.e., inflammatory bowel disease) with a low possibility of emerging lymphoma.
- Prominent hypoechoic mesenteric lymph nodes – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

## **SECONDARY FINDINGS**

- Decreased corticomedullary distinction in both kidneys with very mild pyelectasia – The bilateral renal findings are consistent with age-related change. Pyelectasia of the left/right kidney could be

consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other.

### INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The pancreas in this individual is large, hypoechoic and irregular. There is a moderate amount of surrounding hyperechoic mesentery. These findings are most consistent with moderate pancreatitis, although infiltrative disease to the pancreas is possible.

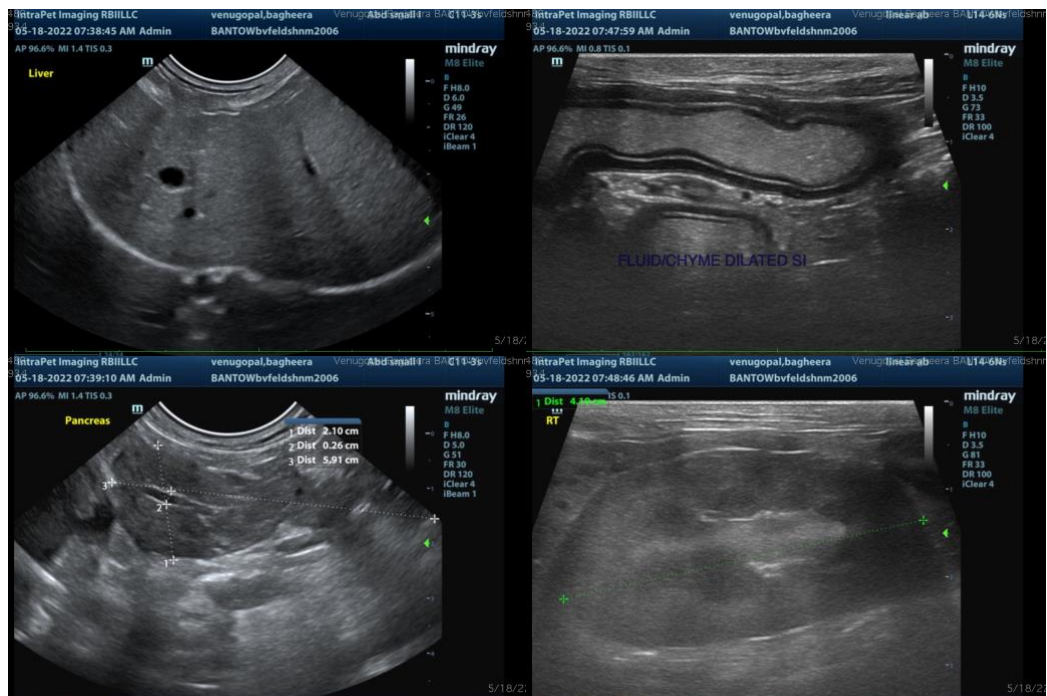
- Recommend a GI panel with quantitative fPLI, TLI, cobalamin and folate (to Texas A&M University) to further evaluate the pancreas and small intestine.
- Recommend symptomatic therapy for pancreatitis including anti-nausea medication, pain medication, fluids, etc.

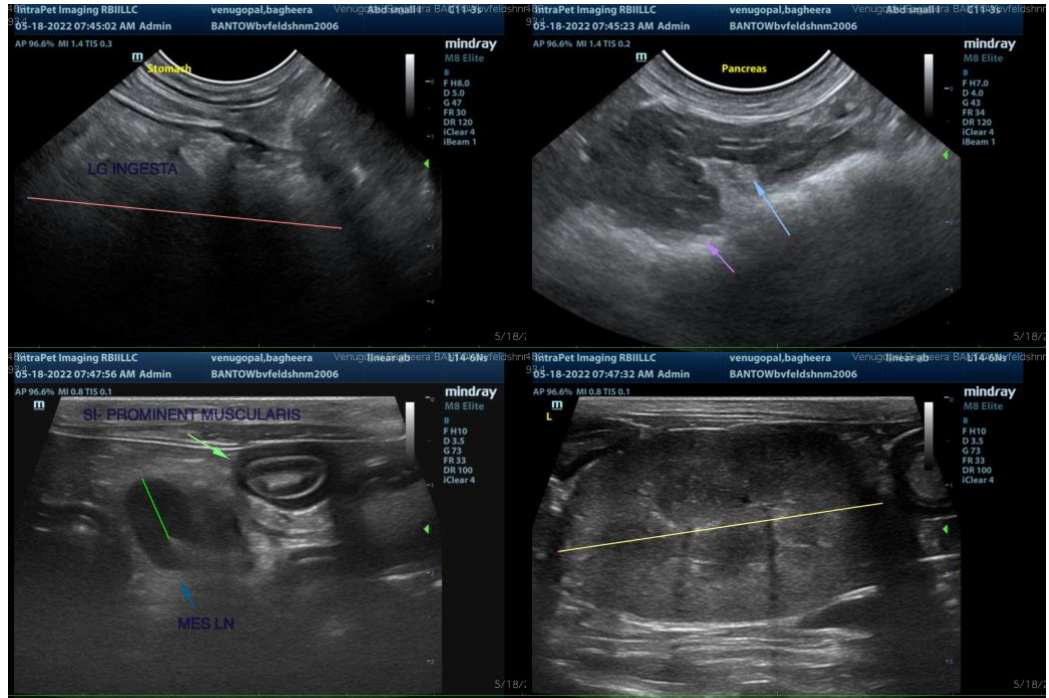
Consider a fine needle aspirate of the pancreas.

Additionally, there is a significant lymphadenopathy. This is not a typical finding for pancreatitis. Consider a fine needle aspirate of a mesenteric lymph node.

The small intestine appears somewhat thickened with diffuse fluid distention, most consistent with some ileus. This could also be the cause for the gastric distention noted, less likely foreign material causing a partial obstruction. Correlate with abdominal radiographs and continued close monitoring. If symptomatic treatment for pancreatitis is not helpful, and a cytologic diagnosis cannot be obtained, then consider obtaining GI biopsies.

Consider three view thoracic radiographs to rule out 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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