

**DATE PRESENTING CLINICAL SIGNS**

8/10/21

Had annual bloodwork and had mild elevations of ALT and AST. May have lost weight (not sure if difference in scales) in the past 3 weeks.

**PATIENT**

Daisy Gallup

Current Medications: None

Lab Results: ALT=215 (27-158) U/L. AST=76 (16-67) U/L. T4 normal. USG 1.049. 2+ proteinuria, inactive sediment.

Bloodwork sent to Intrapet staff.

**SPECIES**

Feline

Date of Previous IntraPet Ultrasound: No previous

Sedation: not needed

Stat Report: not requested

**BREED**

Persian

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

2007

The left kidney is normal in size (3.76 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. Trace pyelectasia is present. There is no evidence of infarcts or hydroureter. Renal vasculature is normal.

**WEIGHT**

6.5 lbs.

The right kidney is normal size (3.60 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. Mild pyelectasia is present (0.19 cm in the longitudinal plane). There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

Andrea Nicastro, DVM,  
 Diplomate ACVIM  
 (Small Animal Internal  
 Medicine)

**Adrenal Gland**

The adrenal glands were not definitively visualized. No obvious pathology was observed in the adrenal region.

**HOSPITAL NAME**

Cat Sense Feline  
 Hospital

**Spleen**

The spleen is normal in size (0.64 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

**REFERRING VET**

Dr. Sinclair

**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/not seen.

**INVOICE**

11857

**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 pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. There is disruption in the normal 1:3 muscularis: mucosal ratio and thickening of the submucosal layer in most segments. A line of mucosal fibrosis is also visualized in some regions. Discreet masses are not identified. The ileocecal colic junction and colonic wall

are normal. The lumen of the descending colon contains shadowing fecal material. No obstructive disease is noted.

### ***Pancreas***

The left and right limbs of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated (0.20 cm in diameter). There is no evidence of peripancreatic inflammation or effusion.

### ***Free Abdomen***

There is no obvious evidence of free fluid. A few mid-abdominal lymph nodes are visible. Surrounding mesentery is hyperechoic.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings:**

- Bowel pattern consistent with inflammatory bowel disease/mucosal fibrosis with potential for emerging lymphoma.
- The lymph node changes are most consistent with reactive lymphadenitis or lymphoid hyperplasia.

### **Secondary Findings:**

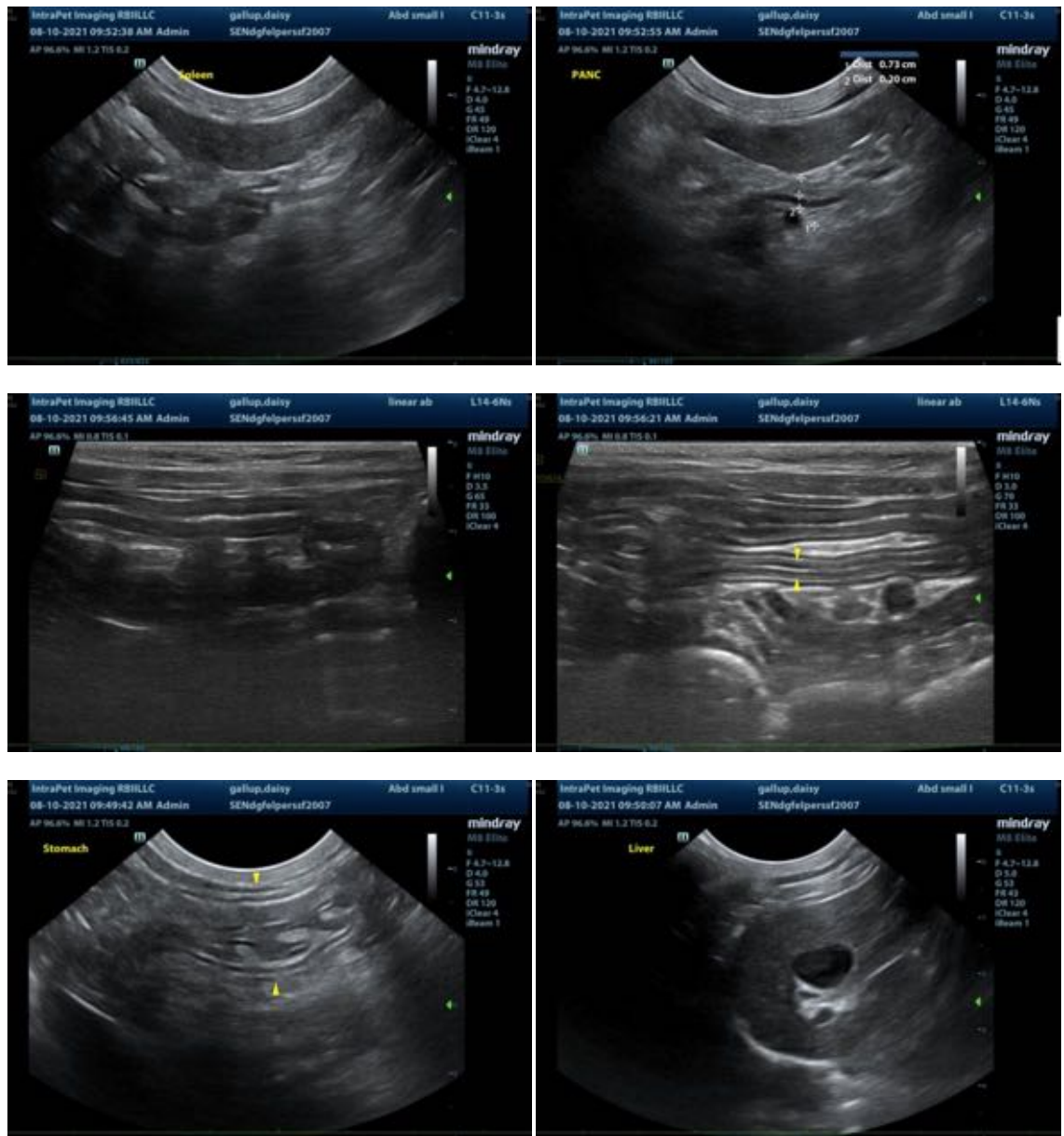
- The pancreatic changes may be a normal variant for this patient or could be consistent with mild, chronic pancreatitis. Correlation with clinical findings is recommended.
- Bilateral age-related renal changes with left dystrophic mineralization.

\*An obvious cause for the patient's elevated ALT is not identified in this study. Differentials include reactive hepatopathy, cholangiohepatitis, lymphoplasmacytic hepatitis, early hepatic lipidosis, infiltrative neoplasia (less likely), other hepatopathy.

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

- Regarding the small intestinal changes, consider the following:
  1. Serum cobalamin, folate, PLI and TLI
  2. A fecal evaluation for ova/Giardia
  3. +/- endoscopic or surgical gastrointestinal biopsies, particularly if the patient is losing weight and/or exhibiting other gastrointestinal signs.
- Regarding the elevated ALT if an aggressive approach is desired, consider a fine needle aspirate (if clotting status is appropriate). A 25-gauge needle should be used. If results are inconclusive, a surgical liver biopsy with aerobic and anaerobic bile cultures can be considered. If a more conservative approach is desired, consider initiation of empirical treatment for cholangiohepatitis (i.e., amoxicillin clavulanic acid +/- Metronidazole, Denamarin). If liver values are not improving within 7-10 days of initiating therapy, antibiotics should be discontinued and hepatic tissue sampling revisited.

- Given the patient's age, three-view thoracic radiographs are recommended to assess for occult neoplasia.





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.

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)  
Andrea.nicastro@sonopath.com