

**DATE PRESENTING CLINICAL SIGNS**

11/26/21 History: Long term waxing and waning inappetence, along with bouts of vomiting and diarrhea. Previous concerns for pancreatitis, GB disease.

**PATIENT**

Ginger Bromley

Current Medications: 11/23/21 Convenia 152 mg SQ, Entyce 54 mg PO SID, Cerenia 40 mg PO SID, Metronidazole 250 mg PO BID, Ursodiol 150 mg PO BID.

Lab Results: 11/23/21 ALP 900, WBC 3.9 L, Neutropenia 2.45, Lymphopenia 1.9.

Date of Previous IntraPet Ultrasound: No previous.

**SPECIES**

Canine

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**BREED**

Spaniel Mix

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

Spayed Female

**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**

12/7/2007

The left kidney is normal size (6.06 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. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

**WEIGHT**

42 Lbs.

The right kidney is normal size (6.82 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

**INTERPRETED BY**

Andrea Nicastro, DMV,  
Diplomate DACVIM  
(Small Animal  
Internal Medicine)

**Adrenal Glands**

The left adrenal gland is normal size (0.55 cm at cranial pole) (0.56 cm at caudal pole) (2.19 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is normal size (0.55 cm at cranial pole) (0.66 cm at caudal pole) (2.33 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**IMAGING PERFORMED BY**

Andi Parkinson RDMS

**Spleen**

The spleen is normal in size (2.19 cm 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.

**HOSPITAL NAME**

Timonium AH

**Liver**

The liver is subjectively prominent in size with normal curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen. Two to three irregular multiseptated cystic lesions are observed. In addition, a 2.29 cm isoechoic swelling/mass is observed on the left side. This lesion disrupts vascular contours. Hepatic vasculature is otherwise of normal volume with no evidence of congestion.

**REFERRING VET**

Dr. McIntyre

The gall bladder lumen is moderately distended. The wall is normal in thickness. A moderate to large amount of aggregated echogenic to mineralized debris/sludge, some of which is partially dependent, and some of which is suspended, is observed within the lumen. The cystic and common bile ducts are

**INVOICE**

10006

normal/not seen.

### ***Gastrointestinal***

The gastric lumen is moderately distended with ingesta. 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. Discreet masses are not identified. The colonic wall is normal. No obstructive or overt infiltrative disease is noted.

### ***Pancreas***

The right limb 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. There is no evidence of peripancreatic inflammation or effusion.

### ***Free Abdomen***

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

- The hepatic swelling/mass could be consistent with benign pathology, (i.e., regenerative nodule) or a neoplastic process, (i.e., adenoma, adenocarcinoma). Histopathology would be necessary to differentiate these lesions.
- The gall bladder changes could be consistent with cholestasis, early mucocele formation, or less likely, fasting

### **Secondary Findings**

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

\*An obvious cause for the patient's gastrointestinal signs is not identified in this study. Considerations include microscopic GI Disease, (i.e., inflammatory bowel disease, infectious/parasitic, intestinal dysbiosis, food allergy, other), low-grade pancreatitis, underlying metabolic issue, other.

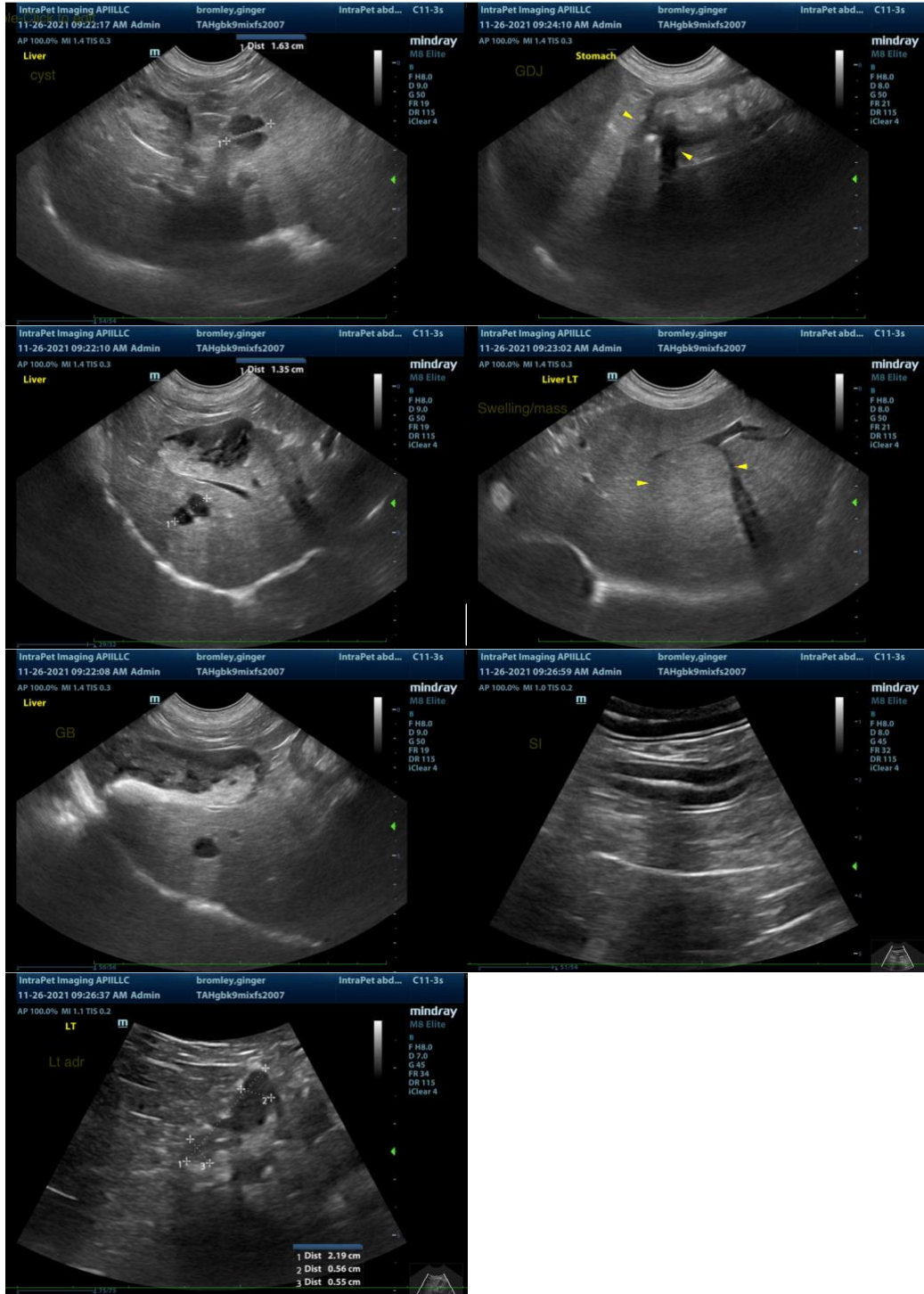
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The following diagnostics/treatment recommendations can be considered:

1. Serum cobalamin, folate, PLI and TLI
2. A fecal evaluation for ova/Giardia
3. Prophylactic deworming with Fenbendazole at 50 mg/kg once a day for 5 days is recommended. Repeat above protocol in 3 weeks.
4. A 6-week limited antigen diet trial to assess for food allergies.

5. Consider empirical treatment for small intestinal bacterial overgrowth with a 4-week course of Tylosin (in lieu of Metronidazole).
6. A resting cortisol level to screen for hypoadrenocorticism. If resting cortisol level is  $< 2.0$  mcg/dL, an ACTH stimulation test is recommended.
7. Depending on the results of the above diagnostics/therapeutics, endoscopic or surgical gastrointestinal biopsies may be warranted.
8. Three-view thoracic radiographs should be performed prior to any anesthetic event.
  - Regarding the gall bladder changes, consider a repeat ultrasound in 2-3 weeks, preferably two hours post-small meal, to reassess the gall bladder. If changes are similar to the current scan, consider initiation of ursodiol therapy. Alternatively, ursodiol therapy can be initiated at this time. Serial monitoring, (i.e., every 6-8 weeks), of the gall bladder is recommended to assess for progression to a mucocele.





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 DACVIM (Small Animal Internal Medicine)  
info@SonoPath.com