

**DATE PRESENTING CLINICAL SIGNS**

9/21/21

Chronic history of elevated wbc. Recent history of vomiting bile and not eating since last two days. Presented today for exam and has been doing better since last night. Did eat a full meal this am but food noted in stomach ( 7-8 hrs. after eating this am).

**PATIENT**

Mocha Mills

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Sedation not necessary.

Stat Report: Not indicated.

**SPECIES**

Canine

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

Shih Tzu

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.

**SEX**

Female, spayed

The left kidney is normal size (4.16 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

**AGE**

2012

The right kidney is normal in size (4.11 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is poor corticomedullary distinction. Pinpoint hyperechoic foci are observed within the cortex. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

**WEIGHT**

9.43 kg.

**Adrenal Glands****INTERPRETED BY**

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

The left adrenal gland is borderline enlarged (0.57 cm at cranial pole) (0.65cm 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.

The right adrenal gland is borderline enlarged (0.64 cm at cranial pole) (0.61 cm at caudal pole) (2.12 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.

**HOSPITAL NAME**

Banfield Towson

**Spleen****REFERRING VET**

Dr. Mike

The spleen is normal in size with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

**Liver****INVOICE**

12237

The liver is subjectively enlarged with slightly swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely homogeneous in appearance. No distinct focal lesions are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is thin and smooth. A small amount of aggregated echogenic partially dependent debris is observed within the lumen. The cystic and common bile ducts are normal/not seen. The gall bladder lumen is moderately distended. The wall is thin and smooth. A moderate amount of gravity-dependent echogenic debris is observed within the lumen along with a 0.86 cm aggregation of mineralized sand. The cystic and common bile ducts are normal/not seen.

### ***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. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

### ***Pancreas***

The right limb is prominent with minimal deviation from the normal peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and homogeneous in appearance. No distinct focal lesions are observed. The pancreatic duct is not overtly dilated. There is no evidence of peripancreatic effusion.

### ***Free Abdomen***

There is no evidence of free fluid. A 0.47 cm gastric lymph node is visualized. Surrounding mesentery is hyperechoic.

## **ULTRASONOGRAPHIC FINDINGS**

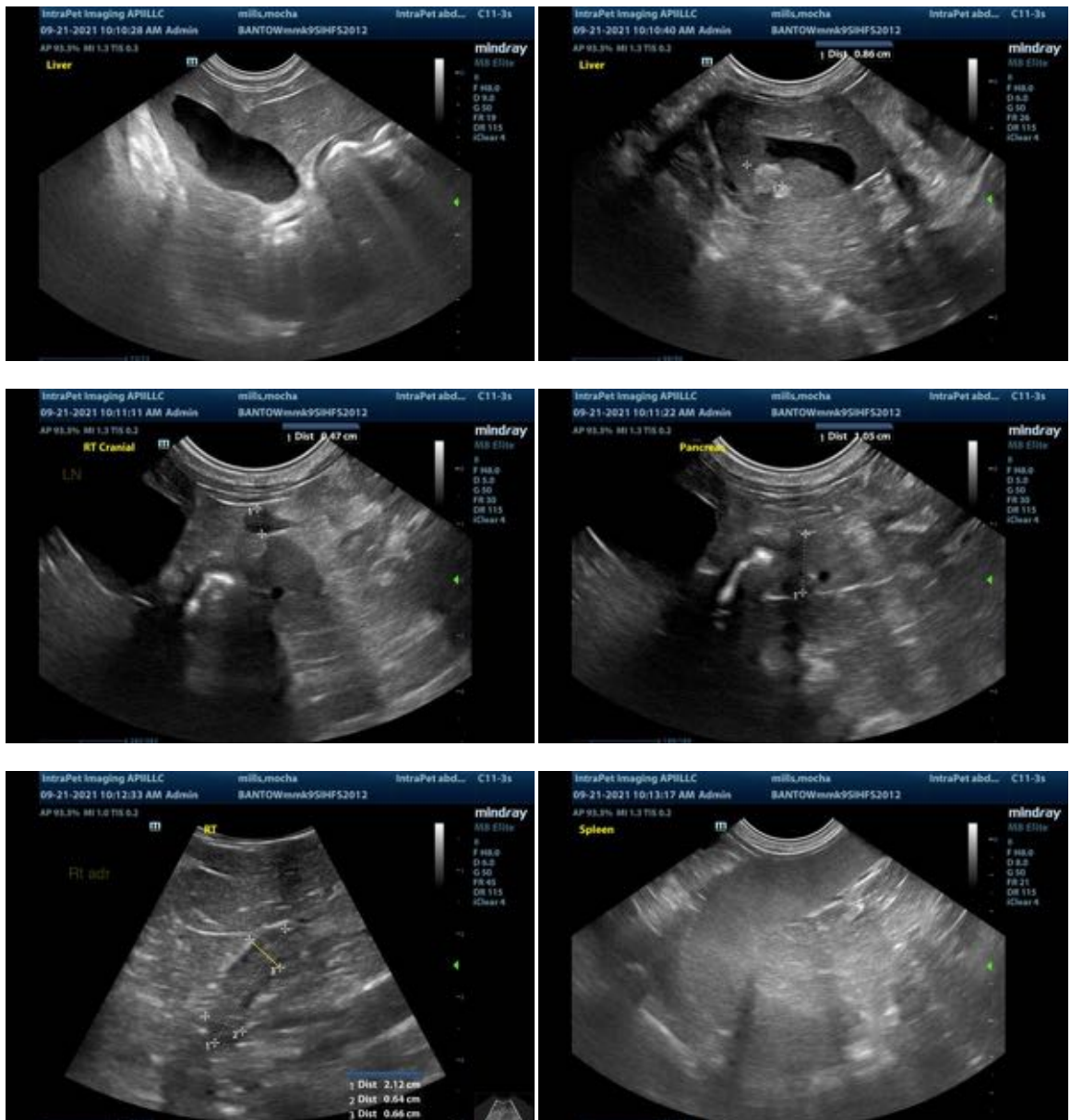
- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely. However, correlation with the patient's lab results is recommended.
- Echogenic to mineralized gallbladder debris- incidental.
- 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.
- The prominent gastric lymph node is most likely reactive.
- Mild bilateral adrenomegaly.
- Bilateral age-related renal changes with dystrophic mineralization.
- 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.

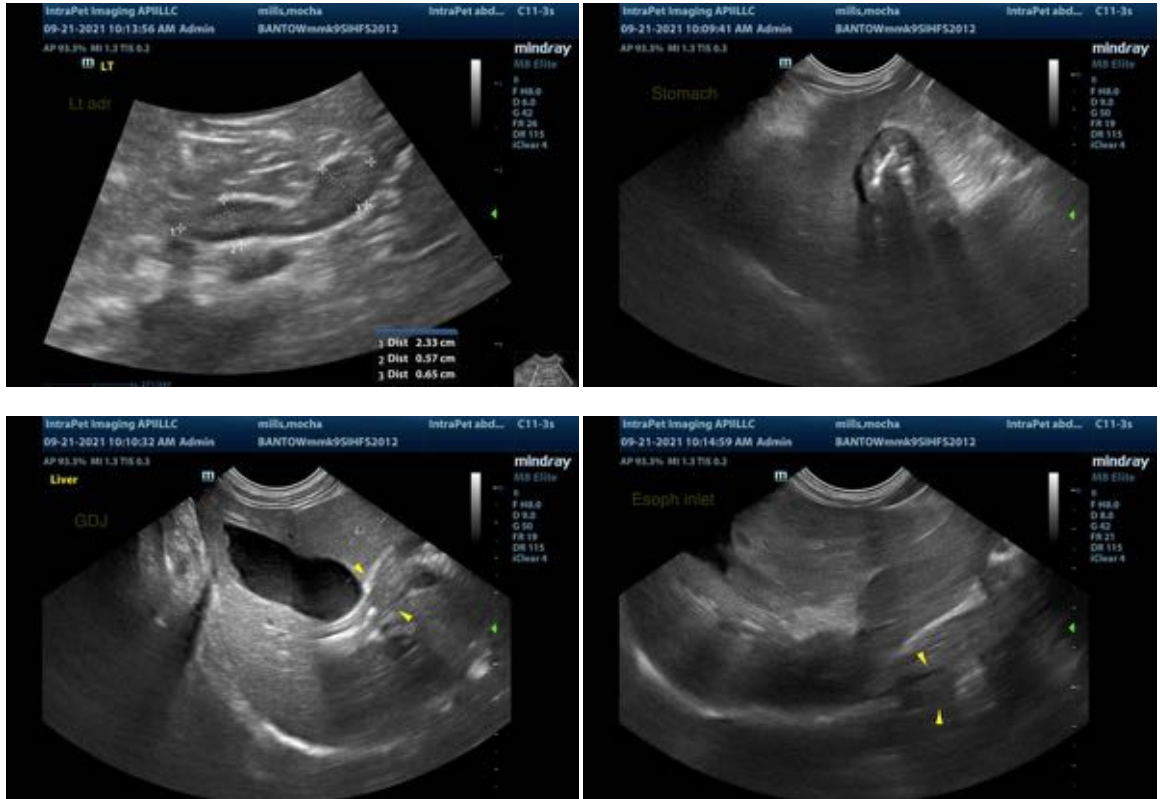
\*An obvious cause for the patient's elevated white count and clinical signs is not identified in this study.

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

- Three-view thoracic radiographs are recommended to assess for occult aspiration pneumonia or other pulmonary pathology.
- Consider a urine culture and sensitivity to assess for occult pyelonephritis as a cause for the elevated white count.

- Regarding the vomiting, consider the following:
  1. A fecal evaluation for ova/Giardia
  2. Serum cobalamin, folate, PLI and TLI
  3. Supportive care for acute gastroenteritis.
- If clinical signs do not improve and the above diagnostics are inconclusive, a more advanced GI workup may be warranted.





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