



**PATIENT PRESENTING CLINICAL SIGNS**

Chip Rought History: Hx of anorexia and vomiting for 3 weeks duration. Ingested part of a nerf dart  
Abnormal PE/Chem/CBC/UA Results: Painful in cranial abdomen

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Feline Urinary System**

The bladder is mildly distended. A scant amount of suspended echogenic debris is observed within the lumen. No cystic calculi are observed. The region of the trigone and visible portion of the proximal urethra are normal.

**BREED**

DSH

The left kidney is normal in size (4.26 cm in length) with a normal shape, architecture and 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 hydroureter.

**SEX**

Neutered Male

The right kidney is normal in size (4.11 cm in length) with a normal shape, architecture and 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 hydroureter.

**AGE**

2 years

**Adrenal Glands**

The left adrenal gland is normal size (0.38 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature appear normal.

**WEIGHT**

9 lbs

**Spleen**

The spleen is contracted with normal curvilinear peripheral contours. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature appears normal.

**INTERPRETED BY**

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

**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.

**IMAGING PERFORMED BY**

Adrienne Waffle

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.

**HOSPITAL NAME Gastrointestinal**

Torch Lake VC

The gastric lumen is moderately fluid-distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The proximal duodenum and one to two segments of small intestine are moderately fluid-distended. Within one of these segments, the wall is thickened (up to 0.41 cm) with some shadowing within the lumen. The mesentery effacing the serosal surface of this region is hyperechoic. The remaining small intestinal segments are empty. In the empty segments, the wall is normal in thickness with retention of normal layering. There is disruption in the normal 1:3 muscularis: mucosal ratio in several segments. The colonic wall is normal.

**REFERRING VET**

Dale Ackler

**INVOICE Pancreas**

12896

The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

**DATE**

5.1.23

### **Free Abdomen**

There is no obvious evidence of free fluid. There is no evidence of inflammation or effusion. A few prominent mesenteric lymph nodes are visualized (the largest measuring 1.37 cm in length). The nodes are normal in shape and echogenicity.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

- Suspected small intestinal obstructive pattern with possible foreign material within the small intestinal lumen. The small intestinal wall thickening is most consistent with an inflammatory process with a lower possibility of emerging neoplasia. The diffuse small intestinal wall changes are suggestive of inflammatory bowel disease with some potential for emerging lymphoma.
- Focal peritonitis is present in the region of the thickened small intestinal segments.

### **Secondary Findings**

- The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.
- The splenic contraction is most consistent with dehydration.

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

- Given the patient's age and sonographic changes, consider an abdominal exploratory to assess for foreign material. Regardless of the findings, GI biopsies are recommended given the diffuse small intestinal wall changes.
- Consider three-view thoracic radiographs prior to anesthesia to assess for occult aspiration pneumonia.
- If the patient has a history of chronic GI signs, consider a malabsorption panel, fecal evaluation for ova and Giardia, +/- transitioning to a hydrolyzed protein or limited antigen diet.





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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