

**DATE PRESENTING CLINICAL SIGNS**

3/13/23 History: Weight loss, vomiting on occasion.

PATIENT

Gina Cooley

Current Medications: None. I-131 treatment pending US.
 Lab Results: ALKP 83, Glob 2.5, T4 4.2 (was 5.0 in August last year with no tx).
 Date of Previous IntraPet Ultrasound: No previous.
 Sedation: Not required to complete full diagnostic ultrasound.
 Stat Report: Not requested.
 Imaging Performed By: Stephanie Warga RDCS, RVT.

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

7/8/09

WEIGHT

5.62 Pounds

INTERPRETED BYBeth Johnson, DVM
DACVIM**HOSPITAL NAME**

North Laurel AH

REFERRING VET

Dr. Cohn

INVOICE

21631

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

Urinary bladder is adequately distended. It has a normal uniform wall thickness. Contents include primarily anechoic fluid with occasional echogenic non-shadowing debris, most consistent with incidental suspended lipid in a cat, possibly combined with exfoliated cells, mucous and/or small blood clots. Both sterile inflammation as well as urinary tract infection can also present with echogenic debris. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Left kidney is normal is size (3.49 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Right kidney is normal is size (3.47 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Adrenal Glands

Left adrenal gland is normal in size (0.37 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (0.29 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Spleen

Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

Liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with very echogenic reverberation artifact from intraluminal gas. There is no evidence of obstruction, foreign material or infiltrative disease; however, complete visualization of far wall is partially inhibited by gas. Pyloric outflow tract appears patent.

Diffusely, the visible small intestine demonstrates areas of thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). Small intestinal submucosa is slightly irregular, thick and hyperechoic. In some bowel loops there is some "fuzzy" loss of layering appreciated. The bowel is diffusely mildly fluid distended without evidence of an obstructive pattern, plication, and/or visible foreign material.

The visible colon is normal in wall thickness and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

The mesenteric lymph nodes are prominent in size with swollen capsular contour. Normal elongated shape (length to width ratio) is maintained. There is no loss of parenchymal detail. A very scant amount of anechoic free fluid is noted.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Gastrointestinal lymphoma (suspect) pattern with possible concurrent gastroenteritis- Thick muscularis has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma. Given the concurrent pathology noted, infiltrative neoplasia is considered more likely, but benign IBD cannot be ruled out without tissue sampling. The possible gastroenteritis is consistent with irritation secondary to dietary indiscretion or intolerance, infection (bacterial, viral, other), parasitic or protozoal disease, toxin, other metabolic disease such as pancreatitis, other.
- Reactive mesenteric lymph nodes - infiltrative neoplastic disease cannot be ruled out but is considered less likely.

Secondary Findings

- Urinary bladder debris

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

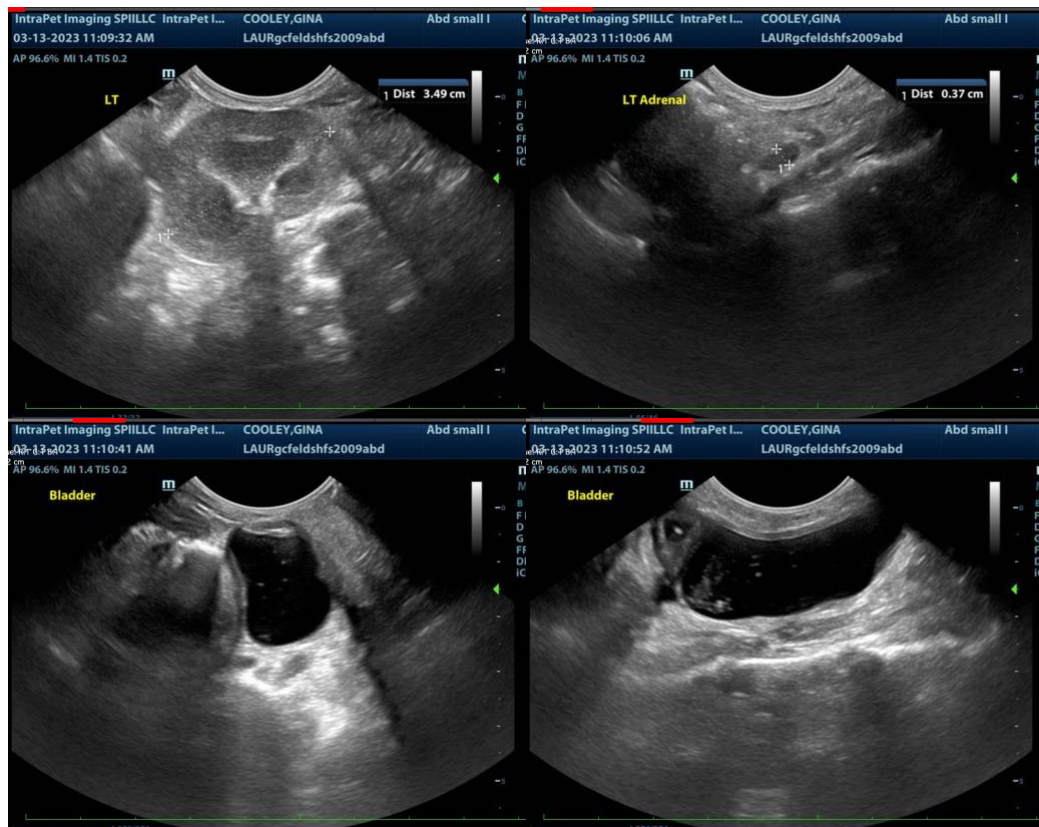
The appearance of the bowel, as described above, is concerning for infiltrative disease, even infiltrative neoplasia, such as lymphoma, given the early or emerging loss of layering. However, benign inflammatory changes, gastroenteritis, etc., secondary to the newly diagnosed hyperthyroidism, as the primary contributing disease, cannot be ruled out as a possibility.

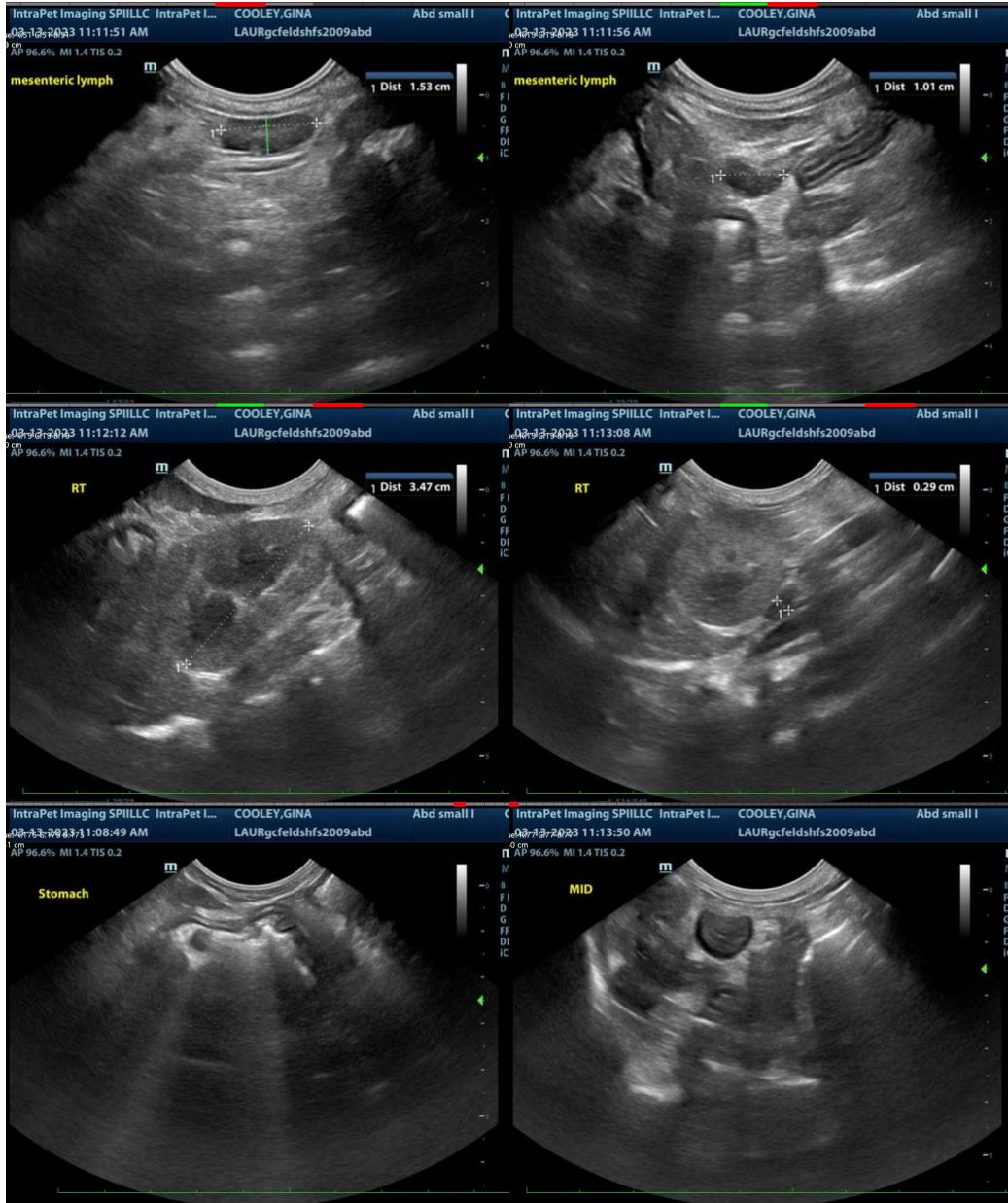
Recommendations include a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI)

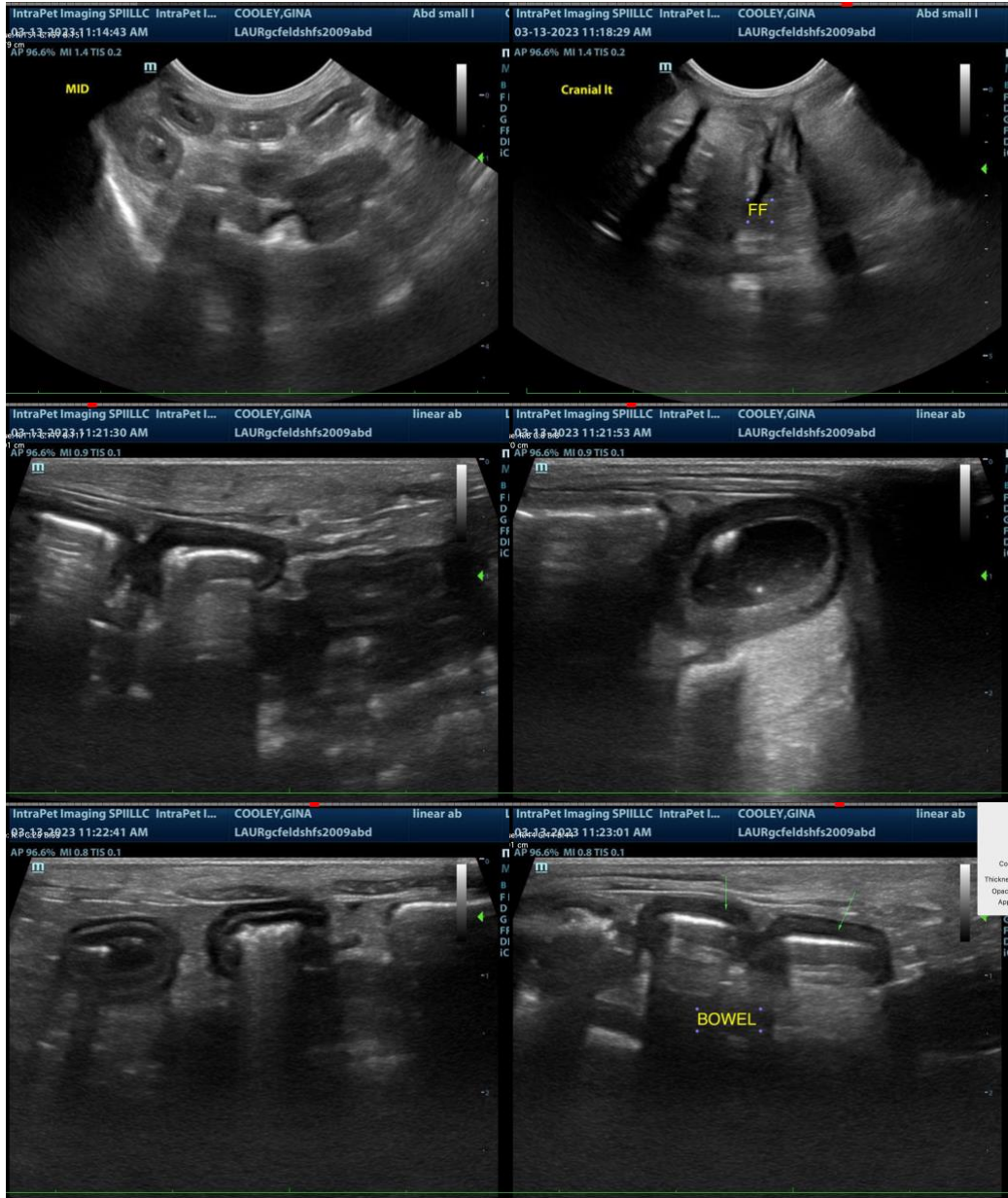
to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function. Ideally, biopsies of the GI tract, being sure to include ileum, if possible, are recommended to definitively diagnose and therefore manage the infiltrative bowel disease.

While further working up of possible inflammatory bowel disease vs GI lymphoma vs other, medical management of hyperthyroidism with oral or transdermal methimazole or potentially dietary management of hyperthyroidism with y/d diet could be considered.

Alternatively, hyperthyroidism could be treated, as was reportedly already planned with ¹³¹I, and further evaluation of the gastrointestinal tract pursued only when/if clinical signs persist beyond treatment of the hyperthyroidism, depending on the order and level of aggressiveness elected by patients owners and attending clinician.







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.

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