

**DATE PRESENTING CLINICAL SIGNS**

7/5/23 Vomiting for 2 months, recently inappetent, weight loss 2 lbs. in last month, BCS 4/9, lethargy.

PATIENT Current Medications: Mirataz SID.

Luke Spence

Lab Results: 6/5/30 CBC chemistry WNL, Chemistry pending on 6/30/23. 6/5/23 hematuria after cysto.

Radiographs: Small heart, bunched intestines cranial abdomen, right kidney slightly larger than left.

Date of Previous IntraPet Ultrasound: No previous.

SPECIES

Feline

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

BREED

DSH

SEX

Neutered Male

AGE

8/4/12

WEIGHT

7.4 Pounds

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

Honeygo AH

REFERRING VET

Dr. Mullenex

INVOICE

43806

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.

Kidneys are overall normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of pyelectasia, mineral or infarcts observed. The left kidney measures 3.66 cm. The right kidney measures 3.79 cm.

Adrenal Glands

The area of the right adrenal gland is examined without evident adrenal gland pathology.

The left adrenal gland is normal in size (0.16 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Spleen

The 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

The 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.

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. Tortuous but not pathologically dilated cystic and common bile duct are noted. This finding is often a normal anatomic variant in senior cats and should be interpreted in vomiting with clinical signs and/or laboratory changes that suggest otherwise.

Gastrointestinal

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

Diffusely, the visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm) However, in the cranial abdomen there is a proximal bowel loop believed to be duodenum that is thicker than the remaining bowel, measuring between 0.30-0.40 cm thick with a concentrically hypoechoic loss of layering. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The observed pancreas appears appropriately isoechoic to surrounding omental fat. The capsule is mildly irregular in shape. Parenchyma is mildly heterogenous and coarse. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of free peritoneal effusion noted in these images.

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.

PRIMARY FINDINGS

- Focally mildly thick duodenum with loss of layering – concerning for infiltrative neoplasia, as loss of layering is a criterion of malignancy (i.e., lymphoma). However, benign inflammatory disease cannot be definitively ruled out without tissue sampling.
- Reactive mesenteric lymph nodes – infiltrative neoplastic disease cannot be ruled out but is considered less likely.

SECONDARY FINDINGS

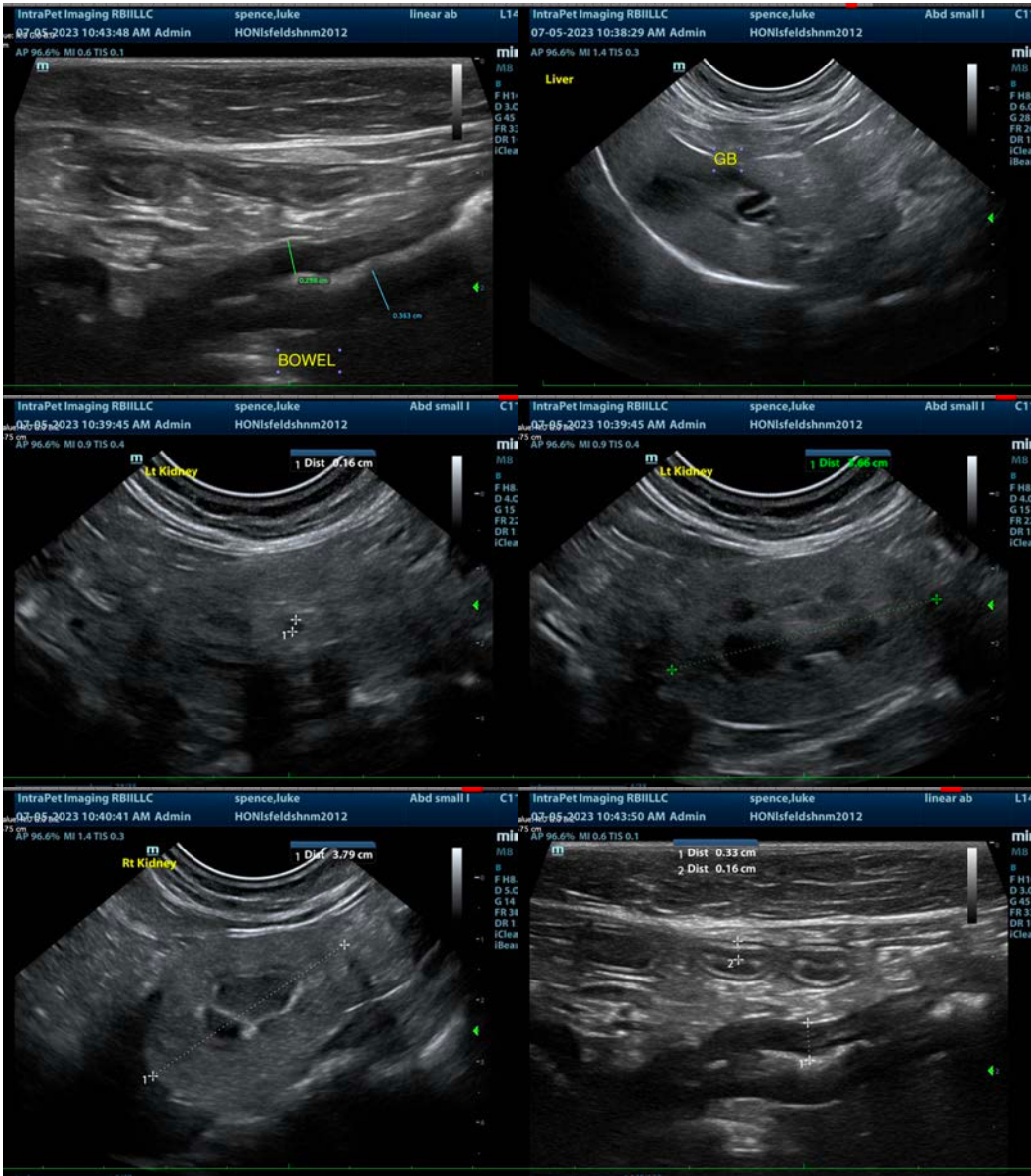
- Pancreatic age-related remodeling – Mild irregularities are consistent with benign age-related change. Low-grade smoldering chronic pancreatitis cannot be ruled out and should be suspected in the face of appropriate clinical signs.
- Age related kidney changes
- Urinary bladder debris

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

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 the focally thick proximal duodenum as described above, if possible, are recommended to definitively diagnose and therefore manage the infiltrative bowel disease. Intra-op ultrasound can be helpful if the focal abnormality cannot be palpably or visibly differentiated.

If biopsies cannot be obtained, empirical therapies could include diet change, empirical deworming with a 5 day course of Panacur, cobalamin supplementation (unless cobalamin level is evaluated and supplementation is not warranted) and prednisolone (if not contraindicated based on patient contraindications, co-morbidities, etc.). Other supportive therapeutic considerations could include fiber supplementation, especially with large bowel diarrhea and/or a probiotic.





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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