

**DATE PRESENTING CLINICAL SIGNS**

2/28/23

Chronic vomiting, first assessed in 2020 and started on hypoallergenic diet. Has developed mild kidney disease in the past 2 years and is currently on Royal Canin Multifunction Renal Support + Hydrolyzed Protein Dry. Seen on 2/2/23 for recent increase in vomiting frequency, currently improving with cerenia but owner interested in pursuing underlying cause.

PATIENT

Dede Hastings

Current Medications: cerenia 12 mg SID to EOD since 2/3/23, Royal Canin Multifunction Renal Support + Hydrolyzed Protein Dry.

SPECIES

Feline

Lab Results: 2/2/23: BUN 33, crea 3.5, sdma 24.1, Mg 1.4, amyl 2032, neu 9775, USG 1.015. 12/8/22: crea 3.3, BUN 34 USG 1.017.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

BREED

Imaging Performed By: Andi Parkinson, BS, RDMS.

Domestic shorthair

SEX

Female, spayed

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder wall is 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. The region of the trigone is normal.

AGE

9/27/2007

The left kidney is normal in size (3.28 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. Trace pyelectasia is present (0.21 cm in the transverse plane). There is no evidence of infarcts or hydroureter. Renal vasculature is normal. The mesentery surrounding the kidney is slightly hyperechoic.

WEIGHT

9.3 lbs.

INTERPRETED BY

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

The right kidney is normal size (3.14 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. Trace pyelectasia is present. There is no evidence of infarcts or hydroureter. Renal vasculature is normal. The mesentery surrounding the kidney is slightly hyperechoic.

Adrenal Glands

The left adrenal gland is normal in size (0.36 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

HOSPITAL NAME

Everhart VH Cross
 Keys

The region of the right adrenal gland is evaluated. No obvious pathology is observed.

Spleen**REFERRING VET**

Dr. Notarangelo

The spleen is normal in size (0.70 cm in width 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.

Liver**INVOICE**

14667

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. The portal vein to caudal vena cava ratio is approximately 1:1. The gall bladder lumen is moderately distended. The wall is thin and smooth. A small amount of aggregated echogenic, mostly gravity-dependent debris/sludge is observed within the lumen. 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 is normal to borderline thickened (up to 0.27 cm) with a normal layering pattern and appropriate mural detail. There is disruption in the normal 1:3 muscularis: mucosal ratio in some segments. Discreet masses are not identified. The ileocecal colic junction and colonic wall are normal. No obstructive disease is noted.

Pancreas

The right limb of the pancreas is normal in size 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

There is no obvious evidence of free fluid. A few prominent lymph nodes are observed adjacent to the ileocecolic junction, the largest measuring 0.92 cm in length. The largest node contains a few cystic areas. A few prominent sublumbar lymph nodes are also seen, the largest measuring 1.03 cm in length. The largest node is also cystic. The mesentery surrounding the nodes is hyperechoic.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- Bowel pattern suggestive of inflammatory bowel disease.
- The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

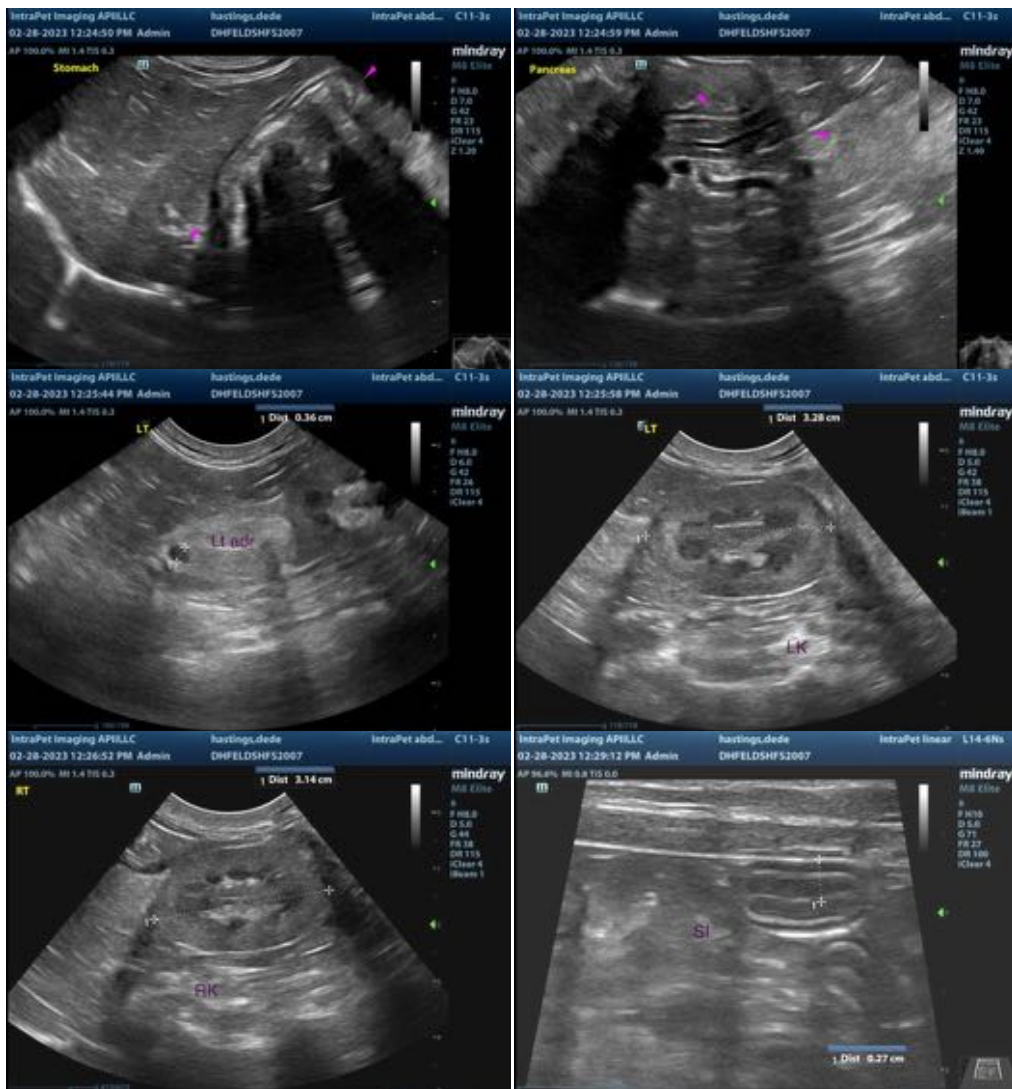
Secondary Findings:

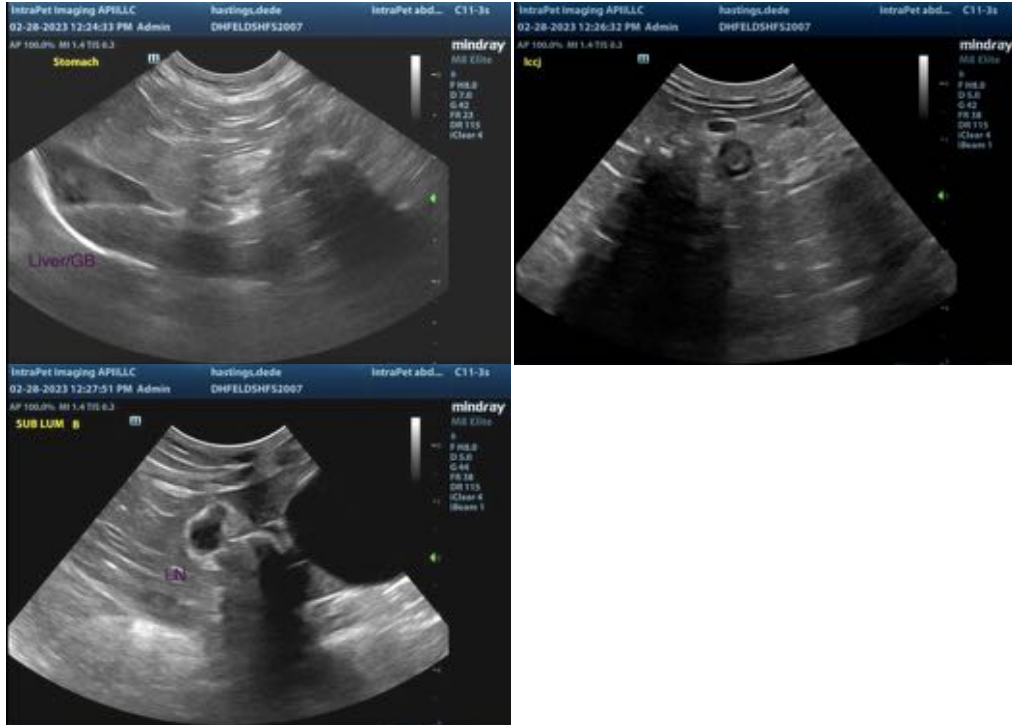
- Bilateral, chronic renal changes with dystrophic mineralization and trace pyelectasia. Mild retroperitonitis is present.
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Given the bowel changes and the recent history of an increase in vomiting frequency, consider the following:
 1. A fecal evaluation for ova/Giardia
 2. GI panel including serum cobalamin, folate, TLI and PLI
 3. Consider empirical treatment for *Helicobacter pylori*, which often occurs secondary to inflammatory bowel disease.
 4. If clinical signs persist, GI biopsies (i.e., endoscopic or surgical) may be warranted.
- Regarding the azotemia, consider the following:

1. Urine culture and sensitivity
2. UPC (if proteinuria is present in the absence of infection)
3. Baseline blood pressure measurement
4. Serial monitoring of the patient's renal values to assess for progression





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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