

**DATE PRESENTING CLINICAL SIGNS**

6/16/22

Presenting complaint: Chronic diarrhea (small bowel) of at least 3 month duration, previous dx of chronic renal disease

PATIENT

Remy Martin

History: Right FHO performed on 1/5/22, Weight loss of 1.6 pounds from 12/2021 to 4/2022--Currently stable at 11.2lbs, Diarrhea became worse with Metronidazole and Provable probiotics. Multiple diet trials (Hill's GI Biome, K/D, and Z/D with no improvement. Currently on Hill's D/D Venison and Green Pea since 6/1/22 with minimal improvement to diarrhea), occasional inappetence seen since diarrhea started. Evidence of vomiting/regurgitating of undigested food seen once every month to every 2 months since diarrhea started.

SPECIES

Feline

PE: Moderate muscle wasting, Grade I/VI Heart Murmur.

BREED

DSH

Current Medications: Gabapentin 100mg Capsules: 1 capsule mixed with food 3 hours prior to veterinary visits for anxiety.

SEX

Spayed Female

Lab Results: April 18, 2022: Though considered WNL by lab, she is IRIS Stage 2 (Creatinine 1.9 mg/dl, SDMA 12), UA (Cysto): Specific Gravity: 1.016, Urine protein 2+, Hemoglobin: 2+, WBC: 2-5/HPF, RBC: 2-5/HPF, 1+ Hyaline casts (1-2/LPF).

I also included abdominal radiographs from 11-27-21: main abnormality was bilateral hip dysplasia.

Date of Previous IntraPet Ultrasound: 11/30/21 Echo.

Sedation: Gabapentin. No further medications required to complete full diagnostic ultrasound.

Stat Report: Not requested.

AGE

6/16/12

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**WEIGHT**

11.2 Pounds

Urinary System

The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

INTERPRETED BYBeth Johnson, DVM
DACVIM

The kidneys are bilaterally small, irregular and diffusely echogenic with decreased corticomedullary distinction and poor visualization of internal architecture. A cortical cyst is noted in the left kidney. The left kidney measures 3.92 cm. Mild pyelectasia is noted in the right kidney as well as non-obstructive nephrolithiasis. The right kidney measured 4.0 cm.

IMAGING PERFORMED BY

Rachel Brilhart RDMS

Adrenal Glands

The right adrenal gland is normal in size (0.44 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

HOSPITAL NAME

Parkville AH

The left adrenal gland is normal in size (0.34 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

REFERRING VET

Dr. Martin

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.

INVOICE

38798

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 mildly distended with anechoic bile and suspended, echogenic sediment. The wall is smooth without visible thickening. There is no evidence of cystic or common bile duct dilation. There is no evidence of effusion or inflammation.

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.

The visible small intestines are normal in wall thickness. Normal layering is maintained except for a diffusely disproportionately thick muscularis layer relative to mucosa. 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 pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

PRIMARY FINDINGS

- Thick muscularis – This finding has been reported in cats with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma.

SECONDARY FINDINGS

- Chronic Kidney Disease - This appearance of the kidneys is consistent with chronic kidney disease such as chronic glomerular or interstitial nephritis, chronic pyelonephritis, etc.
- Mild pyelectasia and non-obstructive nephrolithiasis of the right kidney.
- Mild cholecystic debris of unknown clinical significance – This can be seen with biliary stasis from fasting or illness. However, this can sometimes also be associated with hepatobiliary disease in cats, and should be interpreted in combination with clinical signs such as nausea, inappetence, primarily cranial abdominal discomfort, and/or laboratory changes such as increased ALP or total bilirubin.

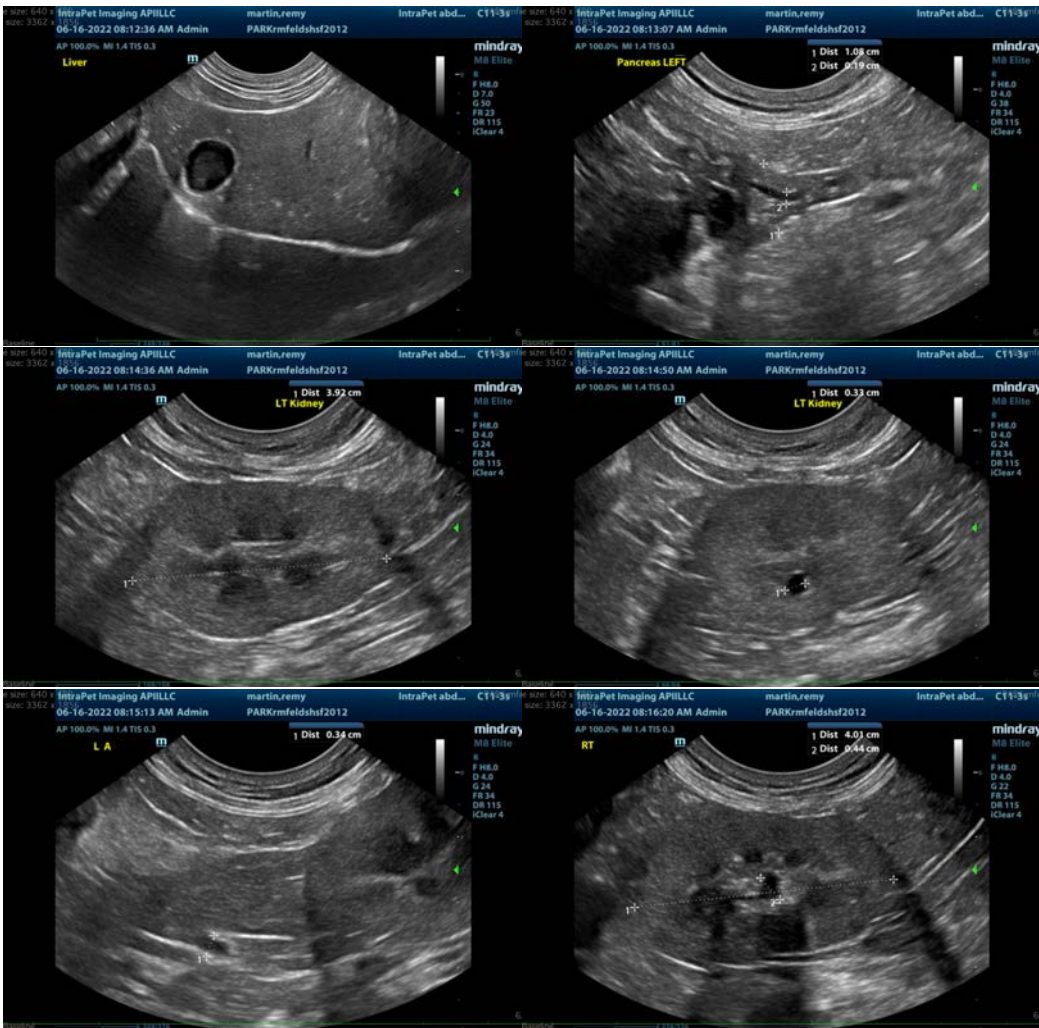
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given the chronic diarrhea and the thick muscularis, infiltrative bowel disease, likely benign inflammatory bowel disease, is suspected, although lymphoma cannot be definitively ruled out. Therefore, a gastrointestinal malabsorption panel including TLI, PLI, folate and cobalamin to Texas A&M GI laboratory is recommended, followed ideally by biopsies of the bowel, being sure to include ileum, if possible, to definitively diagnose and therefore manage the infiltrative process.

Regarding the mild chronic kidney disease, if not recently evaluated, a blood pressure is recommended. Given the reported proteinuria, a urine protein to creatinine ratio is recommended, and treatment indicated if the UPC is <0.5.

Given the mild pyelectasia, a urine culture is warranted, and even if negative, an empirical course of antibiotics could be tried with monitoring of the mild azotemia for any improvement.

To specifically answer the question about severity of kidney disease, the kidney changes are overall mild. However, laboratory changes are a more sensitive indicator of severity, progression, etc.





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.

Beth Johnson, DVM, DACVIM
Beth.Johnson@sonopath.com