



**PATIENT PRESENTING CLINICAL SIGNS**

**PATIENT**  
Felicia Woolery  
Several year history of chronic diarrhea, some vomiting. Often vomiting after eating. Sometimes hematochezia is present. Normal appetite, normal urination.

**SPECIES**  
Feline  
Abnormal PE/Chem/CBC/UA Results: Mildly underweight; matted unkempt hair coat. CBC - normal  
CHEM - azotemia (Creatinine 2.4), hypercalcemia (14), UA - 1+ calcium oxalate crystals

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED**  
DSH  
*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.

**SEX**

Spayed Female

Kidneys are bilaterally irregular and diffusely echogenic with decreased corticomedullary distinction and poor visualization of internal architecture. There is no pyelectasia noted. Non-obstructive areas of mineralization/nephroliths are noted in both kidneys. The left is mildly small at 2.73 cm. The right is normal in size at 3.8 cm.

**AGE**

7 Years

*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.

**WEIGHT**

8 Pounds

The left adrenal gland is normal in size (0.33 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

*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.

**IMAGING PERFORMED BY**

Dr. Gudrun Gunther

*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.

**HOSPITAL NAME**

New Frontier AMC

The 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.

**REFERRING VET**

Dr. Gudrun Gunther

*Gastrointestinal*

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

**INVOICE**

40444

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), except for a mildly thick muscularis layer relative to mucosal layer, most appreciated in the ileum. 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.

**DATE**

8/15/22



**PATIENT**

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

**SPECIES**

***Pancreas***

Feline

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.

**BREED**

***Free Abdomen***

DSH

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

**SEX**

Moderate to severe medial iliac lymphadenopathy is noted. Both reactive lymphadenopathy as well as infiltrative neoplasia are differentials.

Spayed Female

**PRIMARY FINDINGS**

**AGE**

- **Mildly thick muscularis layer relative to the mucosal layer at the level of the ileum** – This finding has been reported with both benign inflammatory infiltrative bowel disease as well as infiltrative neoplasia such as lymphoma. Given the concurrent marked medial iliac lymphadenopathy, lymphoma is a concern. However, benign disease cannot be ruled out without tissue sampling.

7 Years

**WEIGHT**

**SECONDARY FINDINGS**

8 Pounds

- **Chronic Kidney Disease with non-obstructive bilateral nephrolithiasis** – This appearance of the kidneys is consistent with chronic kidney disease such as chronic glomerular or interstitial nephritis, chronic pyelonephritis, etc.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**IMAGING PERFORMED BY**

A fine needle aspirate of the medial iliac lymph nodes is recommended if they can be reached safely and if patient's coagulation status is appropriate. Given the concurrent hypercalcemia, a malignancy panel including PTH, PTHrP, and ionized calcium, as is reportedly pending, is also recommended.

Dr. Gudrun Gunther

**HOSPITAL NAME**

If a diagnosis of infiltrative neoplasia such as lymphoma is not diagnosed cytologically, and the malignancy panel is not suggestive of hypercalcemia of malignancy, then the next diagnostic recommendation to workup the hematochezia is A fecal enteropathogen PCR panel to Texas A&M GI Laboratory could be considered for further evaluation of possible infectious disease.

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Ultimately, biopsies of the colon and ileus, if possible, via colonoscopy, may be necessary to definitively diagnose, and therefore appropriately manage this patient's gastrointestinal disease. In the meantime, the diet transition that is already reportedly in place is recommended, and if biome diet does not help reduce clinical signs, the next trial and error choice could be a novel or hydrolyzed protein diet, or, given the hematochezia, a colitis, higher fiber diet.

Dr. Gudrun Gunther

**INVOICE**

Empirical deworming with a 5-day course of Panacur is recommended, as is a course of antibiotics such as Metronidazole or Tylosin, if tolerated.

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**PATIENT**

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**SPECIES**

Feline

**BREED**

DSH

**SEX**

Spayed Female

**AGE**

7 Years

**WEIGHT**

8 Pounds

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**IMAGING PERFORMED BY**

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**HOSPITAL NAME**

New Frontier AMC

**REFERRING VET**

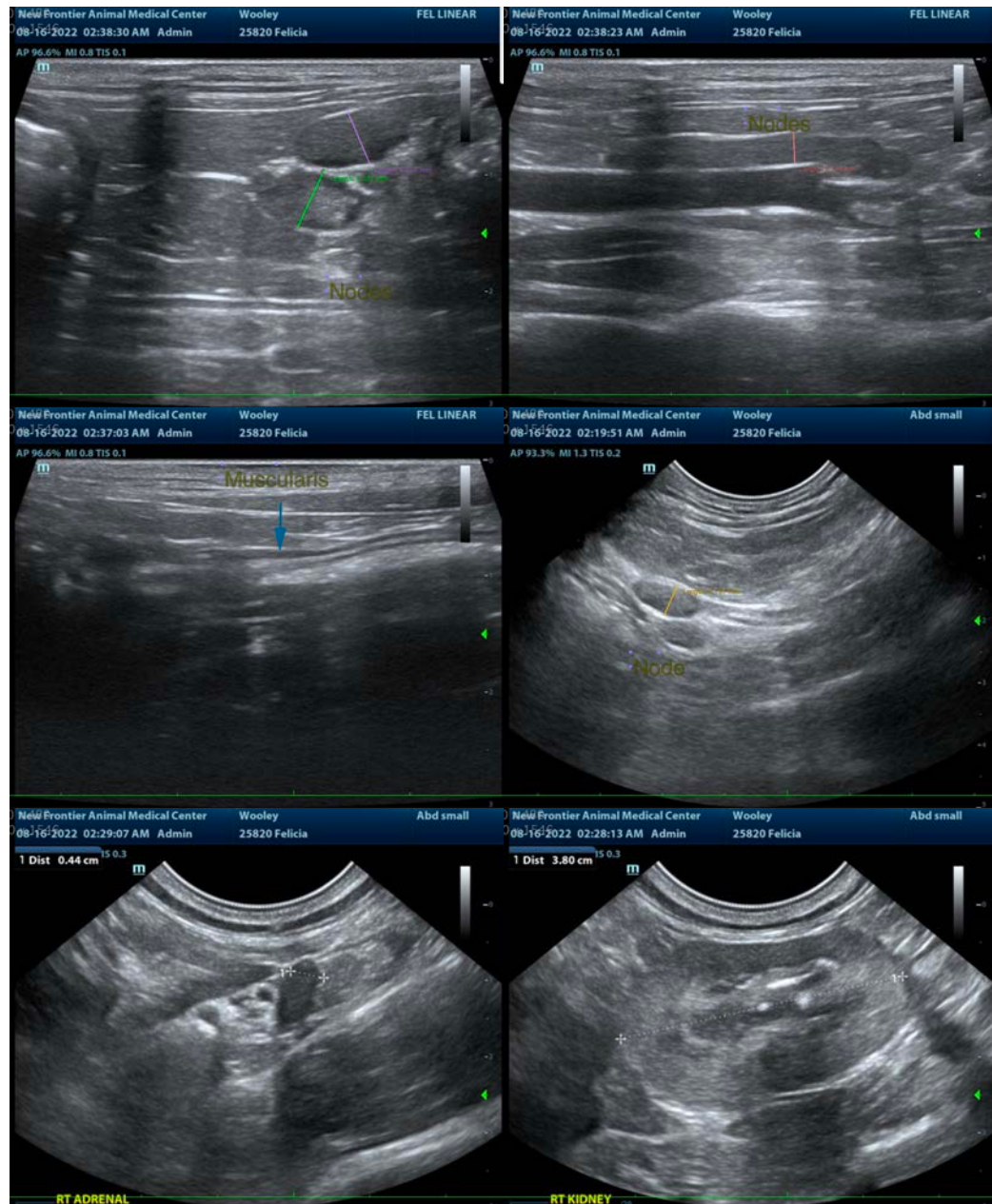
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**PATIENT**

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**SPECIES**

Feline

**BREED**

DSH

**SEX**

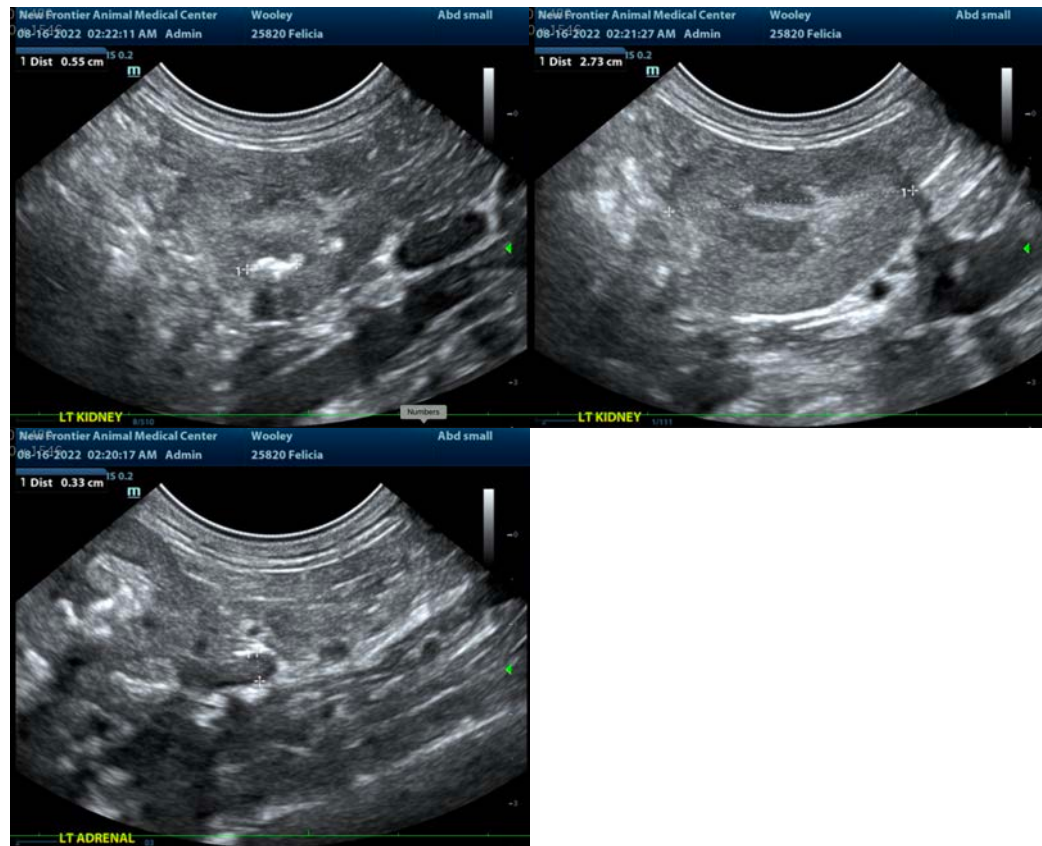
Spayed Female

**AGE**

7 Years

**WEIGHT**

8 Pounds



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**REFERRING VET**

Dr. Gudrun Gunther

**INVOICE**

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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**  
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