



**PATIENT PRESENTING CLINICAL SIGNS**

**PATIENT** Carl Godel Carl presented Dec 22, 2021 for lameness/abnormal use of the left hindlimb. PE was normal other than the rotational movement of the hip and stifle. X-rays were unremarkable for orthopedic disease. He improved some on gabapentin medication for about 10 days. He presented today because he has begun to seem weaker and has issues with the right hindlimb now. Owner is concerned about clicking of his hip as well as petting him in the hip area seems painful.

**SPECIES**

**Feline** Abnormal PE/Chem/CBC/UA Results: PE: QAR, weak, notable weight loss (dropped 1.3lbs from 12/22/21). HR and lungs auscult wnl. Temp 100.3F. Noted paresis of the hindlimbs, slight crepitue of the right hock, very sore over the hips/lower lumbar spine, painful on palpation of caudal abdomen, bladder full but not painful when palpated. CBC - mild lymphopenia. Chem mild hypokalemia 3.4, ownl. FELV - neg. HW - neg. FIV - positive. Chest x-rays unremarkable other than deviation dorsally of the caudal sternum & xiphoid, OA of the shoulders. Pending IDEXX Feline Neuro panel. Empirically started on Clindamycin and pain management, concerns for GI inflammatory disease/neoplasia +/- active FIV suspected on US.

**BREED**

DSH

**SEX**

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Neutered Male

**Urinary System**

Urinary bladder is moderately distended. It has a normal uniform wall thickness (<0.2 cm). Contents include primarily anechoic fluid combined with marked suspended echogenic non-shadowing debris within the fluid. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

**AGE**

7 Years

**WEIGHT**

9.7 Pounds

Both kidneys are at the upper end of normal limit to mildly large in size with the left kidney measuring 4.07 cm and the right kidney measured 4.7 cm with increased cortical echogenicity. Normal smooth peripheral margination and shape are maintained. There is a normal 1:3 cortex:medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

**Adrenal Glands**

Right adrenal gland is normal in size (1.2 cm long x 0.6 cm at the cranial pole and 0.38 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Left adrenal gland is normal in size (1.2 cm long x 0.4 cm at the cranial pole and 0.3 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**HOSPITAL NAME**

Paws & Prairie AC

**Spleen**

Spleen is near the upper end of normal limit for size with rounded margins but intact capsule. Parenchyma is homogenously coarse/mottled in echotexture and normal to hypoechoic in echogenicity. No focal nodules or masses are observed. Splenic vasculature appears normal.

**REFERRING VET**

Dr. Chrissy Krell

**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.

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34014

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**PATIENT** 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.

Carl Godel

**Gastrointestinal**

**SPECIES** 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.

Feline

**BREED**

DSH

The visible small intestines are normal in wall thickness. Normal layering is maintained except for a diffusely disproportionately thick muscularis layer relative to mucosa. The proximal duodenum is mildly corrugated. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine 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.

**SEX**

Neutered Male

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

**AGE**

7 Years

**Pancreas**

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.

**WEIGHT**

9.7 Pounds

**ULTRASONOGRAPHIC FINDINGS**

- Urinary bladder sediment – Can be caused by incidental suspended lipid in a cat. However, given the marked degree of sediment in this patient, cellular debris or crystalluria is considered more likely.
- Bilaterally hyperechoic kidneys near the upper limit of normal size – Can be caused with normal fat deposition and normal size variant for this patient. However, infiltrative disease such as FIP, amyloidosis, infiltrative neoplasia, etc. and/or glomerular or interstitial nephritis cannot be ruled out, and these findings should be interpreted in combination with any evidence of azotemia or chronic kidneys disease on lab work.
- Coarse splenomegaly – can be associated with congestion caused by sedation (if sedated) but can also be associated with diffuse infiltrative disease. Both benign conditions such as extramedullary hematopoiesis, lymphoid hyperplasia, amyloidosis as well as infiltrative neoplastic diseases such as round cell neoplasia should be considered.
- 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. The corrugated duodenum is suggestive of enteritis, possibly caused by the infiltrative small bowel disease.

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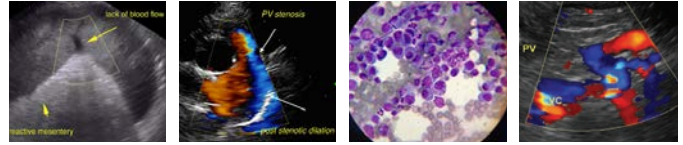
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**PATIENT INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**PATIENT** Carl Godel In this patient, the kidney changes are considered most likely a normal variant in this patient with fat deposition. However, the urinary changes are more severe, and recommendations include a urinalysis and urine culture, especially given the reported caudal abdominal pain. The thick muscularis is suggestive of infiltrative bowel disease as previously noted. Therefore, recommendations include a gastrointestinal malabsorption panel including TLI, PLI, folate and cobalamin to Texas A&M GI laboratory, followed ultimately by either endoscopic biopsies (being sure to include the ileum if possible) and/or surgical full thickness biopsies.

**SPECIES** Feline

**BREED** DSH Finally, fine needle aspirate of the spleen could be considered if patient's coagulation status is appropriate. In the meantime, treatment recommendations are continued pain management and arthritis management as well as empirical antibiotics while awaiting a urine culture. Other empirical therapies could include a diet change to a novel or hydrolyzed protein diet as well as empirical deworming with a 5 day course of Panacur due to the mild bowel corrugation. If biopsies are declined, other empirical therapies could include cobalamin supplementation and empirical steroids.

Neutered Male

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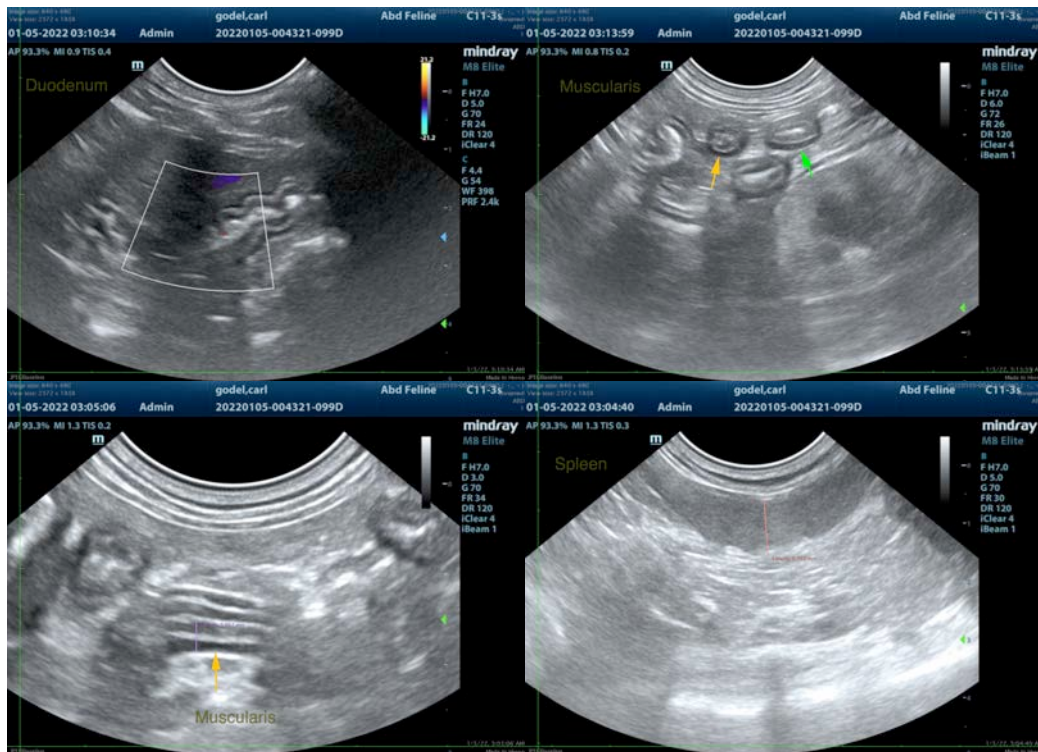
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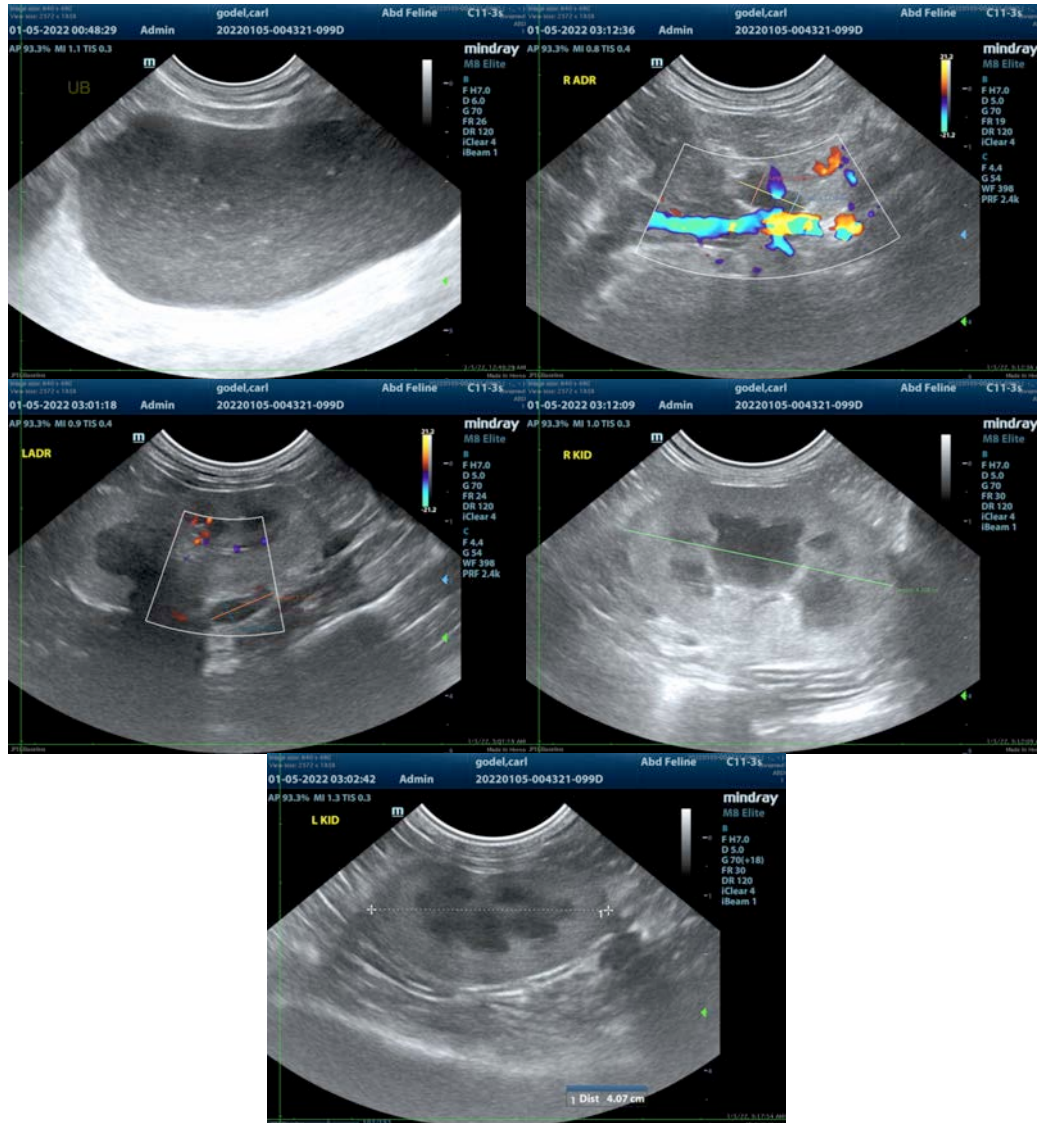
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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