



PATIENT

Philip Grotenhuis

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

15 Years

WEIGHT

5 kg

INTERPRETED BY

Beth Johnson, DVM
 DACVIM

IMAGING PERFORMED BY

Amanda Stewart

HOSPITAL NAME

Buck Animal Hospital

REFERRING VET

Dr. Tomlin

INVOICE

74458

DATE

4/15/26

PRESENTING CLINICAL SIGNS

PU/PD, cystitis, doing well otherwise. Current Medications: None
 Abnormal PE/Chem/CBC/UA Results: WNL

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is adequately 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.

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. Left kidney measured 4.3 cm. Right kidney measured 4.5 cm.

Adrenal Glands

The right adrenal gland is normal in size (0.36 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.41 cm), shape and overall architecture, echogenicity and echotexture. 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

Liver is subjectively enlarged (swollen contour) with a diffusely mildly coarse architecture and subtly increased portal markings. Mildly mixed echogenic changes are noted diffusely. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. Some mineral/sand debris and possibly small, non-visibly obstructive cholecystoliths are noted within the gallbladder. Additionally, some intraluminal mineral sand debris is noted at the level of the duodenal papilla. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

Gastrointestinal

The visible stomach wall is normal in thickness 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 intestine demonstrates areas of moderately thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). Small intestinal submucosa is slightly irregular, thick and hyperechoic, without evident loss of layering appreciated. The lumen of the small intestine is empty with no evidence of obstruction or foreign material.



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

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Pancreas

The pancreas that is observed appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

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Free Abdomen

There is a very trace amount of anechoic free fluid present.

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There is no apparent pathologic lymphadenopathy noted in these images.

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PRIMARY FINDINGS

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- Moderate inflammatory bowel disease (IBD) pattern – Thick muscularis has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma. No loss of layering or distinct characteristics of malignancy are present. Therefore, differentials cannot be further ranked without tissue sampling.
- The hepatobiliary changes are non-specific and could indicate a benign infectious or inflammatory hepatitis/cholangiohepatitis such as bacterial or lymphoplasmacytic, hepatic lipidosis, or infiltrative neoplasia such as round cell neoplasia, which can't be ruled out without tissue sampling. Cholelithiasis is noted, but there is no definitive ultrasonographically visible evidence of obstruction noted in these images at this time.
- The trace free fluid is of unknown origin. Differentials (unless already ruled out) could include increased hydrostatic pressure (cardiac disease and/or vascular or lymph blockage), decreased oncotic pressure (low albumin), vasculitis, paraneoplastic fluid, rupture/leakage of/from an organ (GI, GB, UB, other), blood (hemoabdomen), other.

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SECONDARY FINDINGS

- Mild to moderate age related kidney changes.

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

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Lab work was reportedly normal, but I'm uncertain exactly what lab work was evaluated. Therefore, recommendations are in case not already evaluated, and include:

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- A full general metabolic health screen to include CBC/Chem panel and electrolytes.
- T4 +/- free T4.
- Urinalysis and, if indicated based on urinalysis results, urine culture is recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended.

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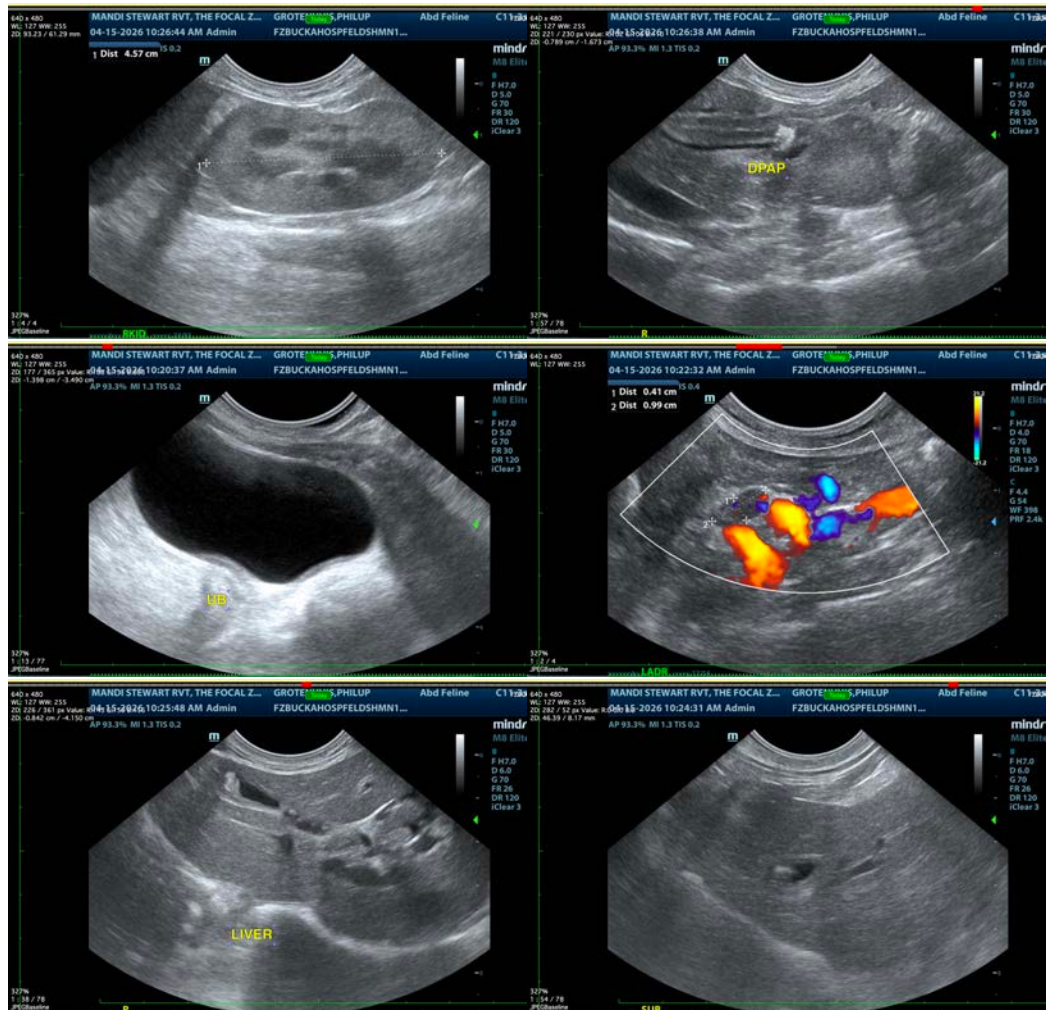
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- Additionally, given bowel changes, a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.
- Ultimately, tissue sampling may be indicated. Fine needle aspirates of the liver could be considered if patient's coagulation status is appropriate, or if a cytologic diagnosis is unable to be obtained, ultimately biopsies of the GI tract, being sure to include ileum, if possible, may be necessary for definitive diagnosis and therefore to further guide medical management.
- Other than supportive/symptomatic medical management of clinical signs, further treatment recommendations are largely dependent on results of the above.





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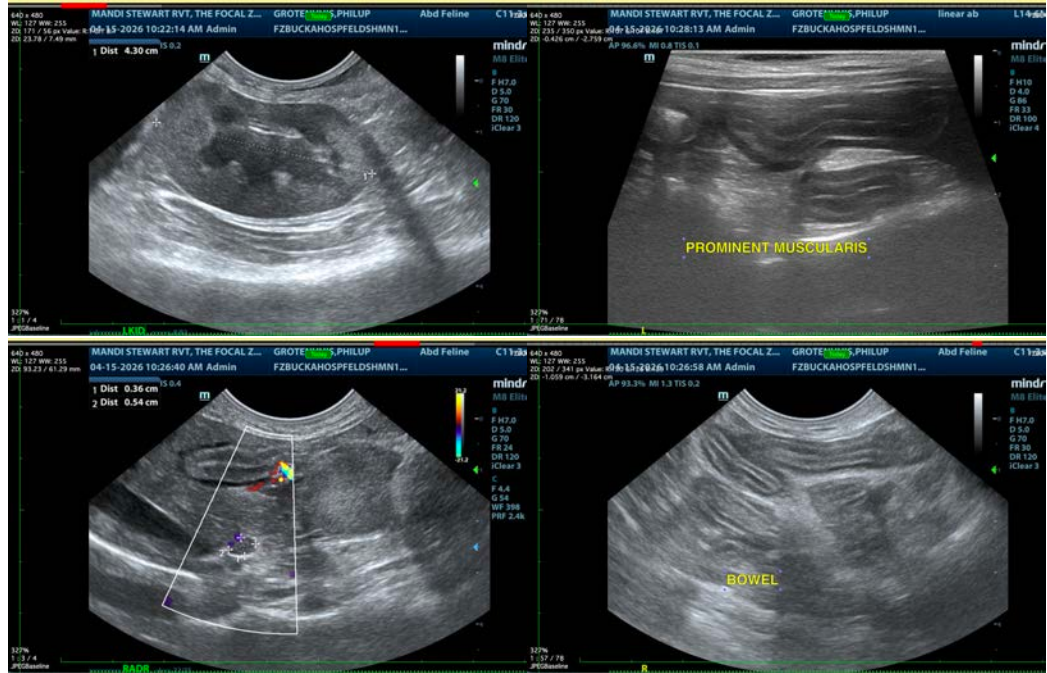
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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
info@sonopath.com