

**DATE**

10/31/22

PRESENTING CLINICAL SIGNS

History: 3–6-month history of progressive weight loss, azotemia (rule out renal vs pre renal), evidence of UTI, chest rads unremarkable.

PATIENT

Po Trump

Current Medications: Plyte at 4mL/kg/hr, Ondansetron 2mg BID, Cerenia 1mg/kg IV SID, Clavamox 62.5mg PO BID.

Lab Results: Azotemia.

SPECIES

Feline

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

BREED

DLH

Imaging Performed By: Andi Parkinson, BS, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX**

Neutered Male

Urinary System

Urinary bladder is adequately distended. It has a normal uniform wall thickness. Contents include primarily anechoic fluid with occasional echogenic non-shadowing debris, most consistent with incidental suspended lipid in a cat, possibly combined with exfoliated cells, mucous and/or small blood clots. Both sterile inflammation as well as urinary tract infection can also present with echogenic debris. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

AGE

12/23/2008

WEIGHT

11.37 Pounds

Left kidney is normal is size (3.95 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, or infarcts observed. Non-obstructive areas of mineralization/nephroliths are noted.

Right kidney is normal is size (4.12 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

INTERPRETED BY

Beth Johnson, DVM
DACVIM

Adrenal Glands

Left adrenal gland is normal in size (0.5 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

HOSPITAL NAME

Charm City Vet

The area of the right adrenal gland is examined without evident pathology.

REFERRING VET

Dr. Hansen

Spleen

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

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Liver

Liver is subjectively enlarged (swollen contour) without disruption of architecture. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal portal vein walls and increased echogenicity relative to the spleen and falciform fat. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

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.

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 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, foreign material or infiltrative disease.

The visible colon is normal in wall thickness and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The observed pancreas 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.

Free Abdomen

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

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- 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 aggressive lymphadenopathy, loss of layering, etc. is noted to make lymphoma more probable, but lymphoma cannot be definitively ruled out without tissue sampling.
- Hyperechoic hepatomegaly – This appearance is most consistent with benign hepatic lipidosis. Infiltrative disease such as amyloidosis or round cell neoplasia, such as mast cell tumor or less likely, lymphoma, is also possible.

Secondary Findings

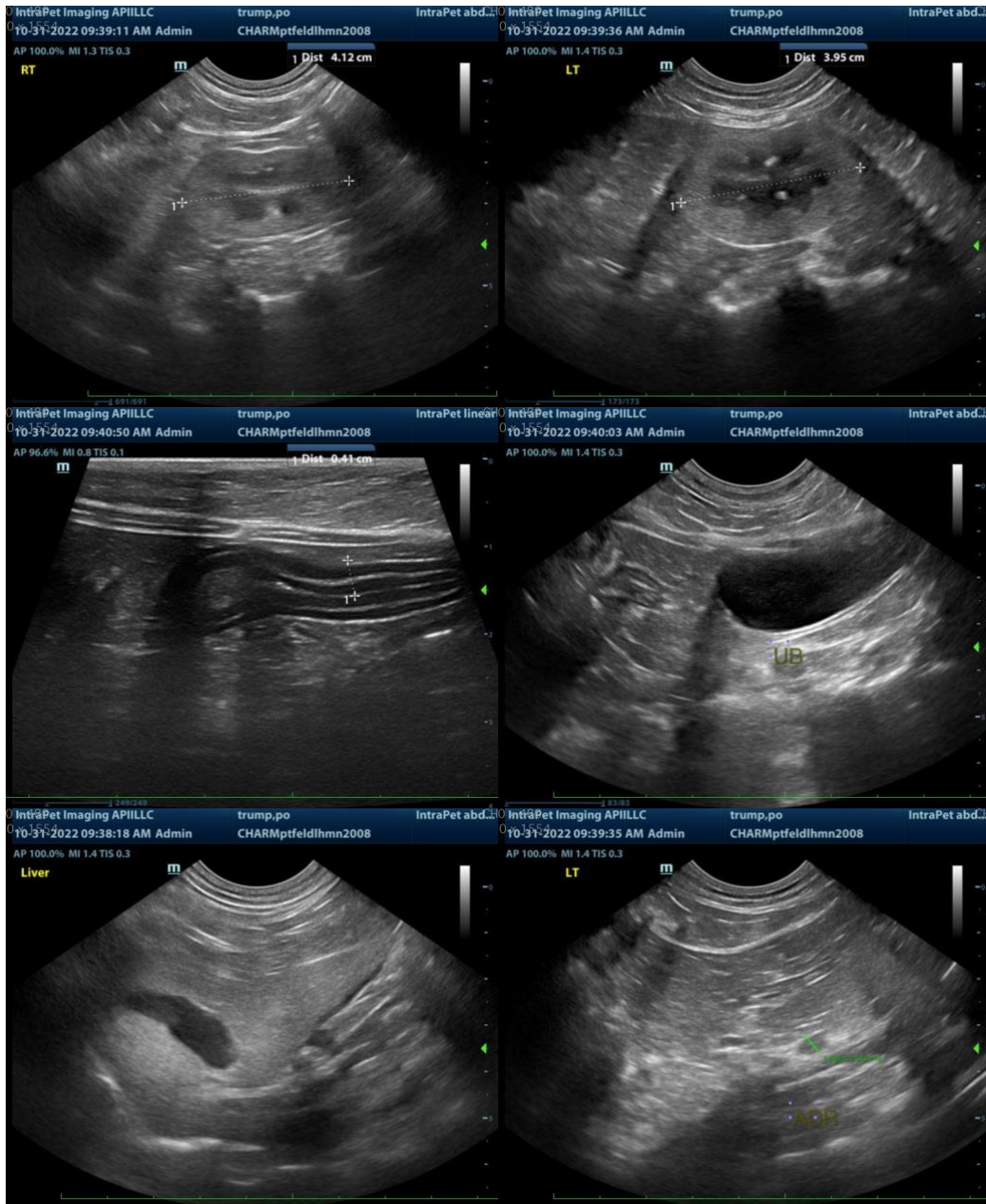
- Urinary bladder debris
- Nonobstructive nephrolithiasis in the left kidney

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

If not already evaluated, obtaining a urine specific gravity while not actively receiving fluids or before fluid therapy is the best way to determine prerenal versus renal azotemia. There is no ultrasonographically visible evidence of kidney disease in these images at this time, however, that doesn't rule out renal azotemia. Given the reported concern for possible urinary tract infection in this patient, a urine culture is recommended if a sterile urine sample was obtained before antibiotics. If not, follow up urine culture a week to 10 days after finishing antibiotics is recommended to assure full clearance of the urinary tract infection. A blood pressure is recommended if not recently evaluated. If azotemia and isosthenuria persist after resolution of the reported urinary tract infection, then management of chronic kidney disease is indicated.

Additionally, given the gastrointestinal changes described above and the reported weight loss, 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, followed ultimately by gastrointestinal tract biopsies to help definitively diagnose and therefore manage infiltrative bowel disease, if related to the weight loss.

In the meantime, empirical deworming with a 5-day course of Panacur is recommended.



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.

Beth Johnson, DVM DACVIM

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