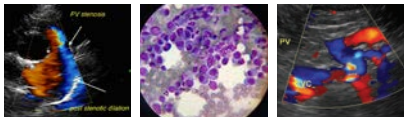
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

1/24/23

PATIENT

Machu Cullum

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

1/19/08

WEIGHT

15 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

HOSPITAL NAME

AMC of Bel Air

REFERRING VET

Dr. Chaudhry

INVOICE

44448

PRESENTING CLINICAL SIGNS

Has not been eating as much and has been losing weight. so he went to homeward bound the said he has arthritis in the wrists gave gabapentin. Went to regular vet they said that he had 2 stones in his gallbladder and arthritis in elbows.

Current Medications: Lactulose 1-2cc every 8-12 hours, Gabapentin 100mg/ml 0.5ml every 12 hours
Radiographs: See attached.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Declined.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

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.

Kidneys are overall normal in size (3.98 cm on the right and 4.56 cm on the left) 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 or infarcts observed. Small non-obstructive nephroliths are noted bilaterally. A chronic infarct is noted at the cranial pole of the left kidney.

Adrenal Glands

The right adrenal gland is normal in size (0.58 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.50 cm), shape and contour. Corticomedullary structure is unremarkable. 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

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. A 2.0 cm round, primarily hyperechoic, mildly cystic mass is noted in the left liver. Visible vasculature appears normal without distension or congestion. Multifocal intrahepatic biliary mineral stones are noted.

The gallbladder is mildly distended with anechoic bile as well as a small amount of echogenic debris, as well as multiple small non-shadowing cholecystoliths. The cystic and common bile duct are tortuous and dilated, measuring 0.40 cm dilated with mineral sand/debris and cholecystoliths noted within the lumen of the duct all the way to the level of the duodenal papilla, where a small cholecystolith appears to be present.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The stomach is mildly distended and contains an echogenic interface with distal progressively shadowing material consistent with hairball density (or similar fluid absorbing material) noted.

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). 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 free peritoneal effusion noted in these images.

There is no apparent lymphadenopathy noted in these images.

PRIMARY FINDINGS

- Cholecystoliths with potential partial obstruction created by mineral/sand debris at the level of the duodenal papilla
- **Feline biliary cystadenoma –** In a senior cat, this liver lesion is most consistent with a/multiple benign biliary cystadenoma(s). Malignancy cannot be ruled out but is considered less likely give lack of clinical signs and/or laboratory changes.
- **Gastric Hairball –** similar density soft foreign material cannot be ruled out.

SECONDARY FINDINGS

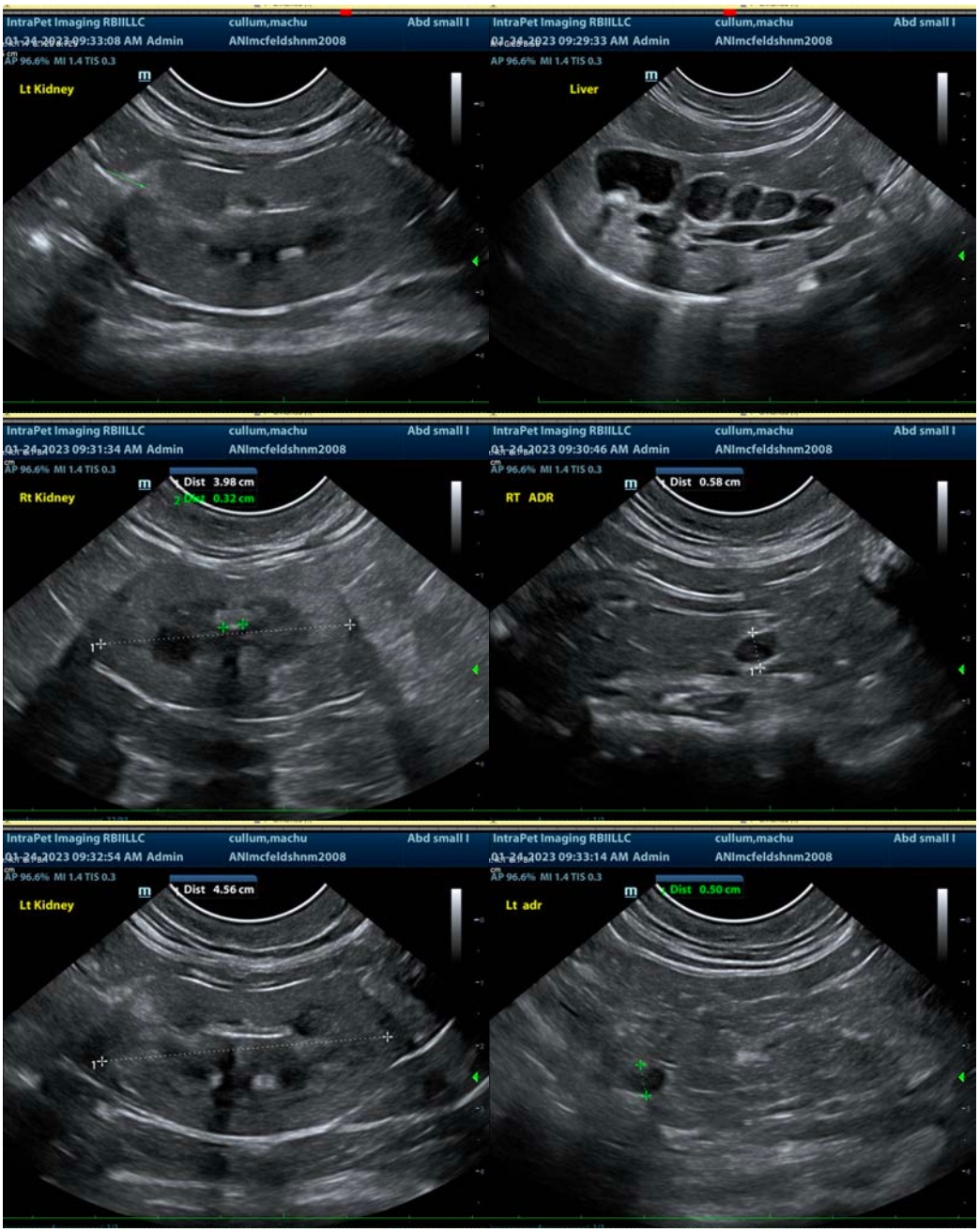
- Urinary bladder debris
- Age related kidney changes with very small non-obstructive nephrolithiasis bilaterally and a chronic infract at the cranial pole of the left kidney

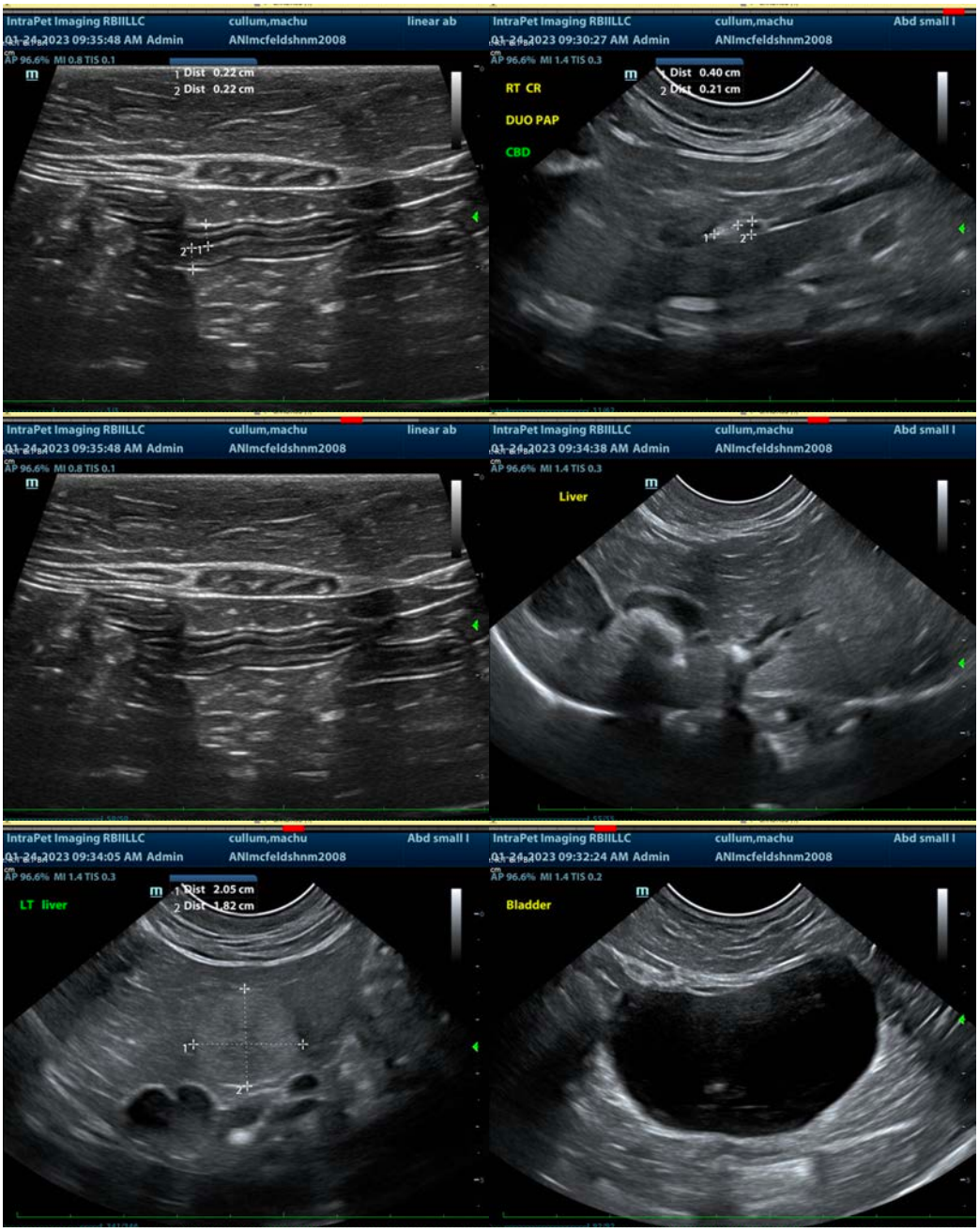
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

If not recently evaluated, a general metabolic health screen including CBC/Chem panel and electrolytes is recommended, as is a urinalysis and, if indicated based on urinalysis results, urine culture. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended.

In the meantime, treatment recommendations include fluid therapy, anti-emetics, gastroprotectants, hepatic nutraceuticals such as ursodiol and/or Denamarin, and broad spectrum antibiotics. Nutritional support is critical to prevent/manage concurrent hepatic lipidosis, so appetite stimulants and/or, if indicated, feeding tube placement is also recommended.

If clinically or based on lab results this patient's clinical signs are not believed to be related to cholangitis/cholangiohepatitis and cholelithiasis, further evaluation of the GI tract and pancreas is recommended, beginning with 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.
If decreased appetite persists beyond therapy and/or vomiting begins, reevaluation of the suspected gastric hairball is recommended to help determine improvement versus progression and whether or not intervention to remove it is necessary.




IntraPet Imaging RBIILLC
cullum,machu
linear ab
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1 Dist 0.22 cm
2 Dist 0.22 cm
IntraPet Imaging RBIILLC
cullum,machu
Abd small I
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ANImcfeldshnm2008
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RT CR
DUO PAP
CBD
1 Dist 0.40 cm
2 Dist 0.21 cm
IntraPet Imaging RBIILLC
cullum,machu
linear ab
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cullum,machu
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Liver
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LT liver
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2 Dist 1.82 cm
IntraPet Imaging RBIILLC
cullum,machu
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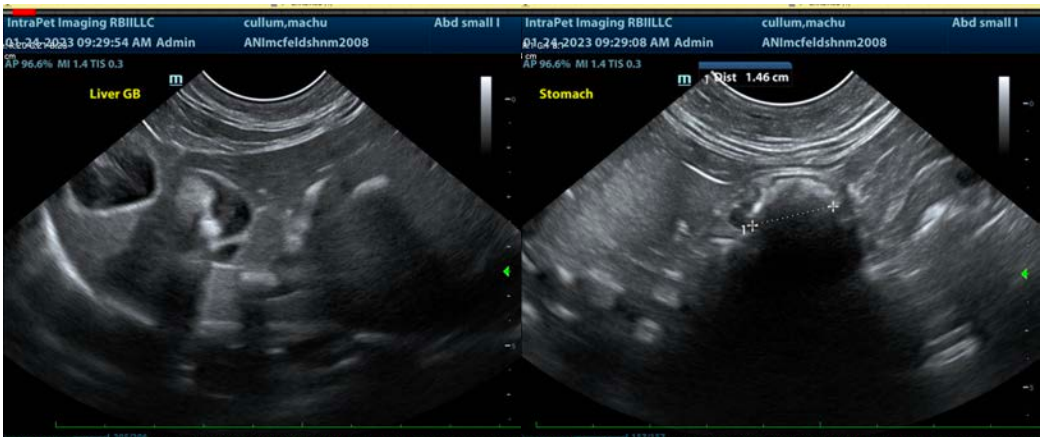
Bladder



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