IMAGING PERFORMED BY

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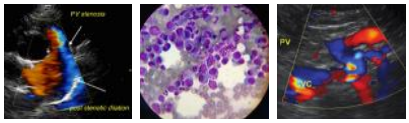

SonoPath
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DATE

3/6/23

PATIENT

Cash Hamilton

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

3/7/10

WEIGHT

10.2 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

Dr. Ruby

INVOICE

21488

PRESENTING CLINICAL SIGNS

History: 2-3 days ago ADR Decreased appetite. No Vomiting or Diarrhea. Drinking but decreased Weight loss within the past week. Went to RDVM today Icteric BW: BG 590 BUN 84 Cr 2.7 Tbili 4.8 K 2.8 If stable owner would like to transfer to RDVM on Monday for further care.

Current Medications: Buprenorphine, Humulin R, RenaKare, Baytril, Protonix, Ampicillin, Cerenia
Lab Results: Hypokalemia-improving with IV and oral supplementation - last check K was 5,0, Elevated Liver enzymes -slightly better at 24 hours
Azotemia--worsened at 24 hours, Ketones Large to moderate at 24 hours, Active urine-- No culture yet.
Radiographs: bates body, moderate stool --manual extaction this am a moderate amount, then warm water enema. Form stool in the colon, gas in the intestines, no obstructive pattern. Mildly enlarged liver.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Andi Parkinson, BS, 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.

Left kidney is normal is size (4.49 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 mineral or infarcts observed. Mild pyelectasia is noted.

Right kidney is normal is size (4.22 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 mineral or infarcts observed. Mild pyelectasia is noted.

Adrenal Glands

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

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.

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 moderately distended with fluid, as well as some echogenic nonshadowing luminal contents and gas, consistent with normal ingesta/chyme. There is no evidence of obstruction, foreign material or infiltrative disease, however, complete visualization of the far wall is partially inhibited by gas.

The visible small intestines are normal in wall thickness and layering. 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 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

- 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.

- Mild bilateral pyelectasia – Differentials for pyelectasia include pyelonephritis, diuresis, congenital malformation or ureteral or lower urinary tract obstruction.

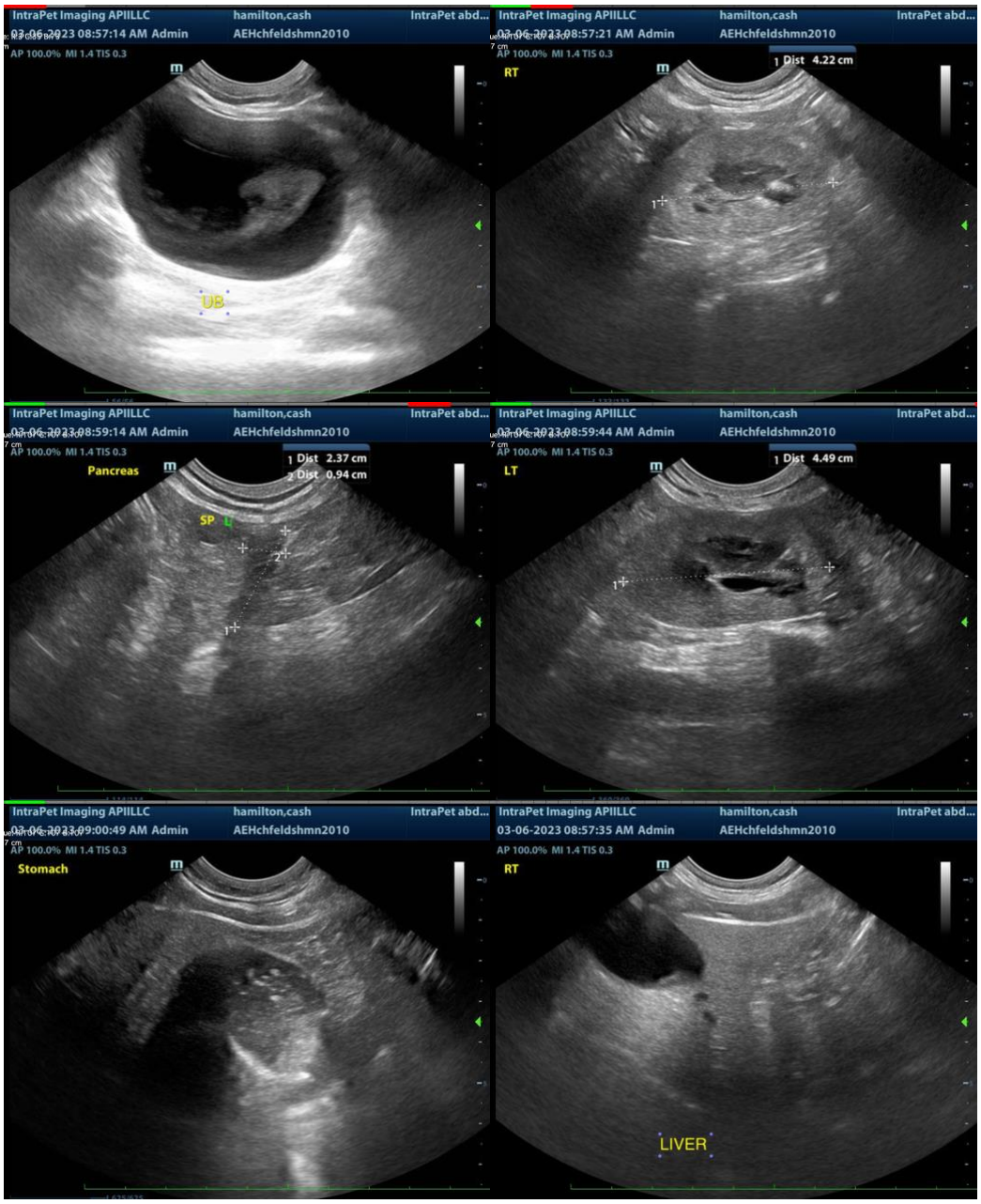
- Urinary bladder debris

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is no evidence of posthepatic cholestasis in this patient, therefore, if there is no anemia to support prehepatic, then the top differential is intrahepatic cholestasis, possibly secondary to hepatic lipidosis, secondary to decreased appetite caused by the reported DKA. Infiltrative disease of the liver cannot be ruled out without tissue sampling but is considered less likely.

If not recently evaluated, recommendations include a urine culture, unless patient is already receiving antibiotic therapy, in which case a culture could be considered a week to 10 days after finishing antibiotic therapy, to rule out an occult urinary tract infection associated with the diabetes mellitus.

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. As is reportedly already in place, additionally, short-acting, in-hospital insulin, with close monitoring of blood glucose levels, electrolytes, ketones, etc., is recommended until ketones have resolved and patient is eating well, at which time a transition to a longer-acting, at-home insulin plan can be pursued.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Pancreas
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2 Dist 0.94 cm
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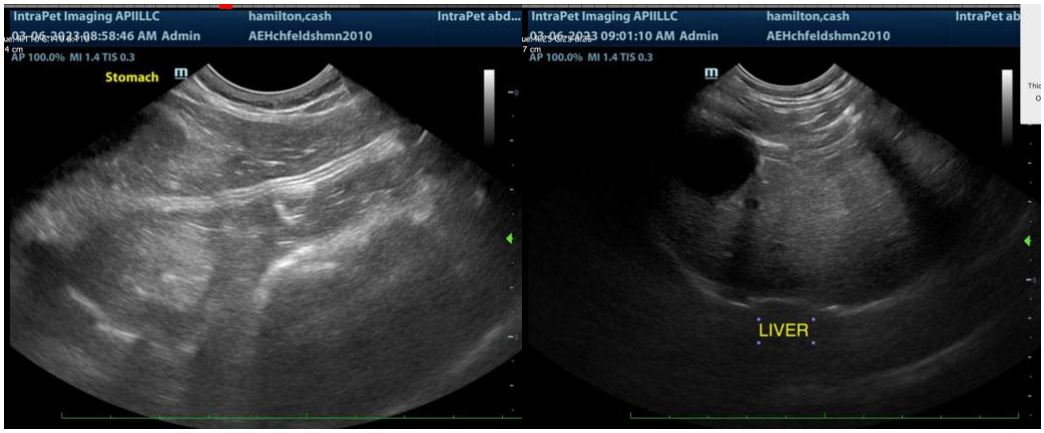
LIVER



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
Beth.Johnson@SonoPath.com