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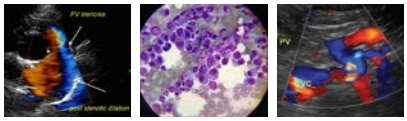

SonoPath
Clinical Sonography & Telecytology
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DATE

8/9/22

PATIENT

Mr. McPussy Fingers Trageser

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

6/15/16

WEIGHT

11.9 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

Dr. Thompson

INVOICE

40267

PRESENTING CLINICAL SIGNS

Mr. McPussy Fingers is a 6 y/o MN DSH who was referred for DKA - Usually big eater, 2 mo ago started having rapid weight loss - was still eating and losing weight - increased drinking - was E/D yesterday, hiding more, more lethargic – vomited yesterday, no diarrhea - indoor only - Felv/FIV negative Medications: - none, no preventatives RDVM BW: ALT 267, ALP 75, K 2.8, Cl 108, Chol 325, Phos 2.9

Current Medications: Potassium Chloride, Protonix, Cerenia.
Lab Results: See attached.
Date of Previous IntraPet Ultrasound:
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately 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.

The right kidney is normal in size (4.78 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.

The left kidney is normal in size (4.65 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.

Adrenal Glands

The right adrenal gland is normal in size (0.44 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.60 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

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.

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. Tortuous, not pathologically distended cystic and common bile duct noted. At the level of the duodenal papillae, there is an echogenic swelling/debris/non-shadowing mineral versus other that does not appear to result in obstruction.

Gastrointestinal

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.

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

Pancreas is prominent (enlarged) in size, hypoechoic to surrounding tissue and has a mildly irregular undulating contour. Parenchyma is coarse with mixed echogenic remodeling noted. Pancreatic duct dilation is noted.

Free Abdomen

There is no evidence of free peritoneal effusion noted in these images.

There is no apparent lymphadenopathy noted in these images.

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.
- Chronic active pancreatitis
- **Tortuous common bile duct** – This can be a normal anatomic variant in a cat. However, in this patient, there is evidence of some swelling versus debris at the duodenal papillae, so a partial early or emerging obstruction could be present. However, there is no pathologic biliary distention at this time.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

A quantitative PLI is recommended if not recently evaluated.

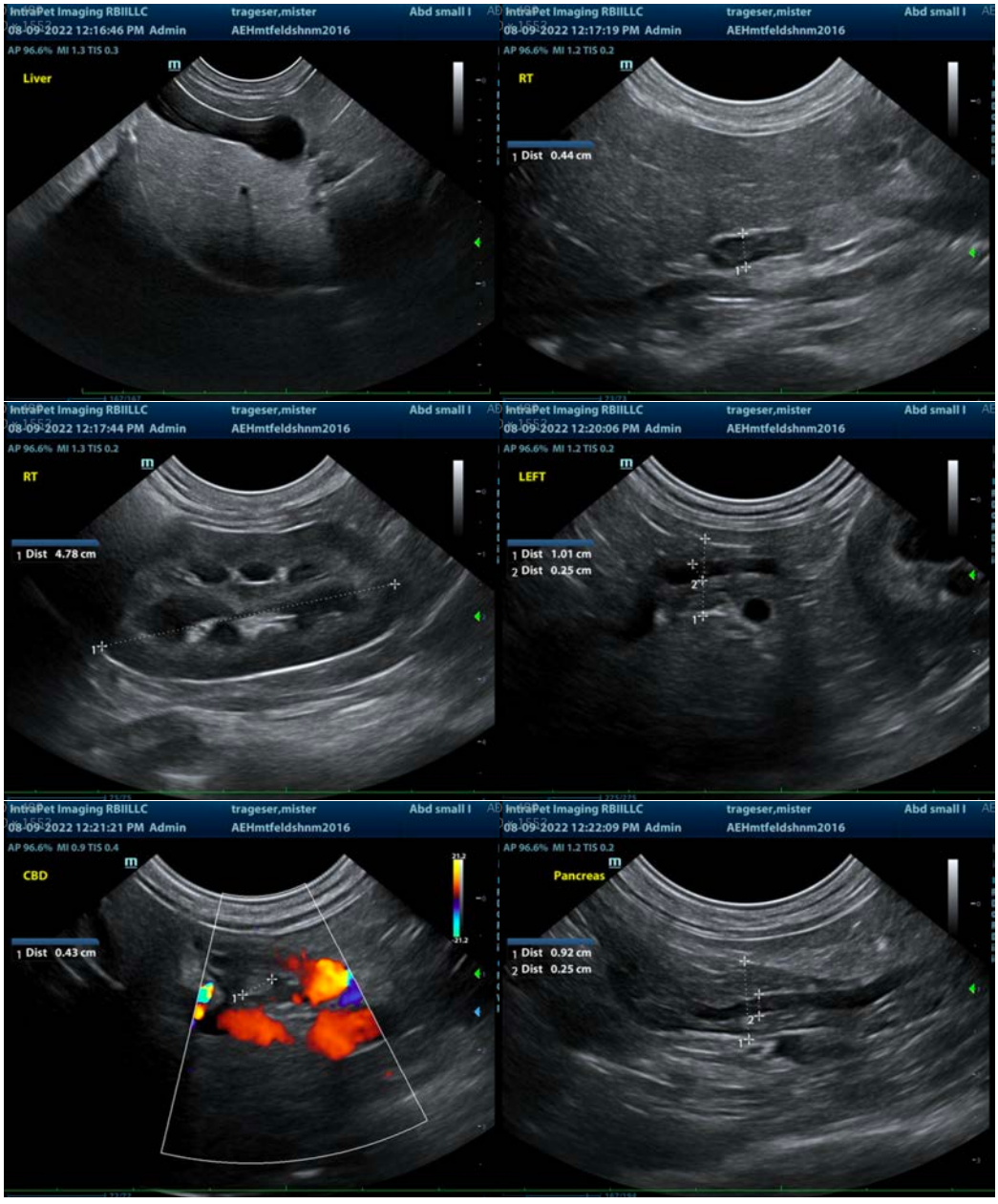
Urinalysis and, if indicated based on urinalysis results, urine culture are recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended.

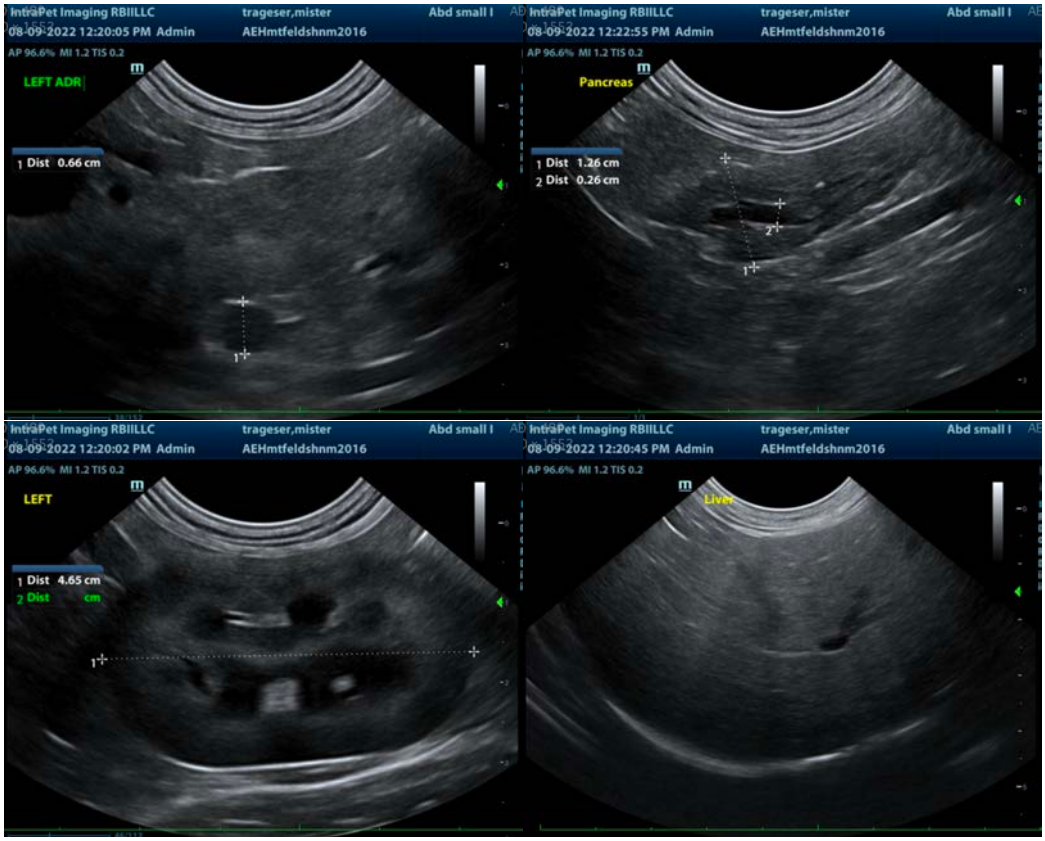
Given the ultrasound appearance, the differentials for this patient's increased total bilirubin appear to most likely be intrahepatic cholestasis, likely brought on by hepatic lipidosis. However, chronic pancreatitis could also be contributing, as could an early or emerging post-hepatic cholestasis. However, again, there is no evidence of post-hepatic at this time. Therefore, a fine needle aspirate of the liver could be considered if patient's coagulation status is appropriate, or alternatively, medical management could be initiated with recheck imaging and more advanced diagnostics such as the fine needle aspirate only being pursued if the patient does not improve and/or laboratory changes progress.

Medical management recommendations include fluid therapy, antiemetics, gastroprotectants, hepatic nutraceuticals such as Denamarin, and broad-spectrum antibiotics. Nutritional support is critical to prevent

progression of/manage current hepatic lipidosis, so appetite stimulants and/or, if indicated, feeding tube placement is also recommended.

Until ketosis has resolved, intermittent short-acting insulin therapy is recommended with a transition to a longer acting at-home insulin planned for when ketones have resolved and patient is reliably eating. If the patient does not improve clinically and/or evidence of cholestasis progresses, recheck imaging for further evaluation of possible emerging post-hepatic obstruction is recommended.





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
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