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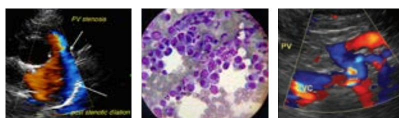


SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

DATE
6/3/22

PATIENT
Cracker Cooper

SPECIES
Feline

BREED
DSH

SEX
Neutered Male

AGE
1/18/09

WEIGHT
8.5 Pounds

INTERPRETED BY
Lisa Carioto, DVM, DVSc, Diplomate ACVIM

IMAGING PERFORMED BY
Andi Parkinson RDMS

HOSPITAL NAME
Timonium AH

REFERRING VET
Dr. Montessi

INVOICE
38366

PRESENTING CLINICAL SIGNS

Chronic V+ and weight loss over last 8 months; PU/PD; PE: perio dz stage 2/4

Current Medications: Started today: FortiFloraSA, Cerenia 8mg SID
Lab Results: Last full labs 3/2022: WBCs 22k- Lymphocytosis (10.3k), Eosinophilia (2800) Monocytosis (660) PrecisionPSL 41 (<26) Amylase WNL 693 (<1200)
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System
The urinary bladder is well distended with anechoic contents. The wall is smooth and regular. No abnormalities are noted with the trigone or proximal urethra, and there is no evidence of sediment, cystoliths, polyps or a mass. Filling of the urinary bladder was witnessed: No abnormal findings (NAF)
Ureteral papilla: NAF

Kidneys
The **left** kidney measures 4.12 cm (3.80-4.40 cm). The capsule is smooth. The cortex is mildly hyperechoic, i.e., it is isoechoic to the spleen. Its overall architecture, including the definition of the cortico-medullary junction, is nicely preserved. There are no signs of nephroliths or pyelectasia. The mesentery surrounding the kidney and spleen is severely hyperechoic.

The **right** kidney measures 4.23 cm (3.80-4.40 cm). The capsule is smooth. The cortex is mildly hyperechoic. A very mild loss of the normal definition of the cortico-medullary junction is present. There are no signs of nephroliths or pyelectasia. The mesentery surrounding the kidney and spleen is severely hyperechoic. The surrounding mesentery is not hyperechoic.

Aortic bifurcation/trifurcation
No abnormalities observed.

Adrenal Glands
The **left** adrenal gland measures 0.52 cm in diameter. No abnormalities are noted with the gland's overall architecture, echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

The **right** adrenal gland measures 0.46 cm in diameter. No abnormalities are noted with the gland's overall architecture, echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

Spleen
The spleen is within normal limits in size 7.6 mm (normal = 10 mm), echotexture, and echogenicity. The capsule is smooth. No abnormalities are observed with its vasculature, i.e. congestion and thrombi are not identified. The mesentery surrounding the spleen and left kidney is severely hyperechoic.

Liver
There are no obvious signs of hepatomegaly and its borders are smooth and sharp. The liver's echotexture is homogeneous. It is very mildly hyperechoic, i.e. it is isoechoic to the right kidney, which is hyperechoic compared to normal. It remains hypoechoic to the falciform fat, however. Focal lesions are not observed and no abnormalities are observed with the hepatic vessels.

The gallbladder wall is within normal limits in thickness and echogenicity. There is no evidence of echogenic material within the GB or edema surrounding it. The portions of the cystic and/or common bile ducts observed are not dilated or tortuous, i.e. there are no signs of an obstruction.

Gastrointestinal

Ingesta and gas are present within the lumen of the stomach. The gastric wall is within normal limits in thickness and the wall layers are well defined. No obvious abnormalities are observed with its peristalsis.

The small intestinal wall thickness is increased, ranging between 0.29-0.31 cm. Although the definition of the wall layers is preserved, the muscularis layer is thicker than normal and fogging is present, i.e. a thin echogenic line extends throughout the muscularis or it is more echogenic than usual.

Ingesta and fluid are present in some of the loops of jejunum.

Abnormally dilated loops of bowel are not observed.

Gas present within the transverse colon.

The colonic wall is not thickened and mural detail is considered normal. Gas is present within the colon.

Pancreas

The **left limb** is mildly to moderately enlarged and diffusely hypoechoic, with regular contours. The pancreatico-duodenal duct is not dilated. The surrounding mesenteric fat is moderately to markedly hyperechoic, suggestive of saponification. These findings are highly suggestive of active pancreatitis. Overt signs of neoplasia are not noted.

An in-depth evaluation of the right pancreas is not possible due to the gas in the surrounding GI tract and ingesta in the stomach.

Other

Lymph nodes

The mesenteric lymph nodes are mildly more prominent and mildly enlarged, measuring approximately 0.7 cm in diameter.

Abdominal effusion

A small amount of anechoic fluid is visualized surrounding the tail of the spleen and caudo-ventrally to the urinary bladder.

ULTRASONOGRAPHIC FINDINGS

- **Pancreas**: Active pancreatitis with secondary steatitis of the mesentery are suspected. Overt signs of neoplasia are not noted.

- **Gastrointestinal tract**: A delay in gastric emptying may be present if the patient was fasted. The intestinal abnormalities and history are highly suggestive of inflammation, such as a chronic enteropathy (e.g., inflammatory bowel disease, food intolerance, etc.). However, infiltrative disease, such as lymphoma or other round cell tumour, cannot be excluded.

- **Lymphadenomegaly**: The very mild enlargement of the mesenteric lymph nodes is most likely due to reactive hyperplasia, however, emerging lymphoma cannot be excluded.

- **Liver**: The very subtle and diffuse hyperechogenicity may be due to cholangitis/cholangiohepatitis, and cholestasis. Hepatic lipidosis secondary to pancreatitis may also be contributing to the hyperechogenicity.

- "Triaditis" cannot be excluded.

- **Ascites** may be due to vasculitis associated with pancreatitis.

- **Kidneys**: Age-related degeneration is observed. Pyelonephritis should not be excluded despite absence of classical sonographic signs, particularly if Cracker is pu/pd. Secondary glomerulonephritis due to systemic inflammation is possible, as is nephrogenic diabetes insipidus.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The following are suggested/recommended

A urinalysis and culture and sensitivity

Analgesia trial for visceral pain, for example, buprenorphine (0.005-0.01 mg/kg sublingually every 8-12 hours) for 5-7 days. Continue for 3-4 weeks if an improvement is noted; the dose and frequency may be weaned during that time to the minimum effective dose.

TLI, serum cobalamin, and folate to assess for maldigestion/malabsorption (stools are often normal in cats with EPI).

Deworming with a broad spectrum dewormer, such as fenbendazole, particularly if Cracker goes outdoors or if he lives with other pets that go outdoors.

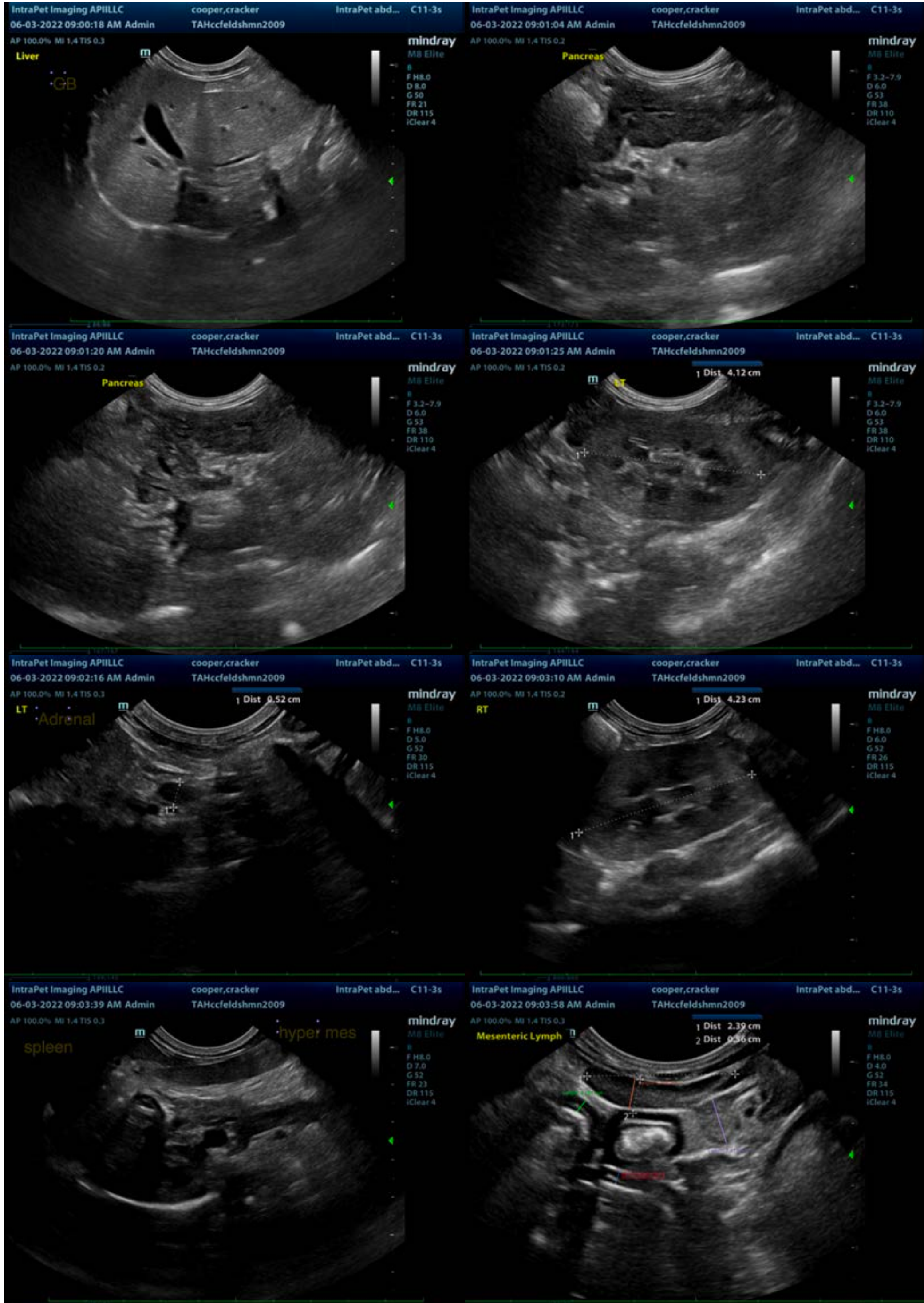
Diet trial (veterinary prescription brand hypoallergenic, i.e., hydrolyzed or novel protein)

Small, frequent meals are recommended.

Differential diagnoses include cholangitis/cholangiohepatitis, and secondary ascending bacterial infections. Although indiscriminate use of antibiotics is not recommended, consider broad-spectrum antibiotics if no response to the above suggestions.

Endoscopy of the upper and lower gastrointestinal tract

If further diagnostics are not pursued, although not ideal, empirical treatment for inflammatory bowel disease may be considered. A dose of prednisolone (1 mg/kg/day) may be administered for 2 weeks, and then tapered to the minimum effective dose. Note, this will affect the ability to diagnose lymphoma or other round cell tumour and is not recommended if chemotherapy or fine needle aspirates of the lymph nodes, liver, spleen, etc. will be pursued.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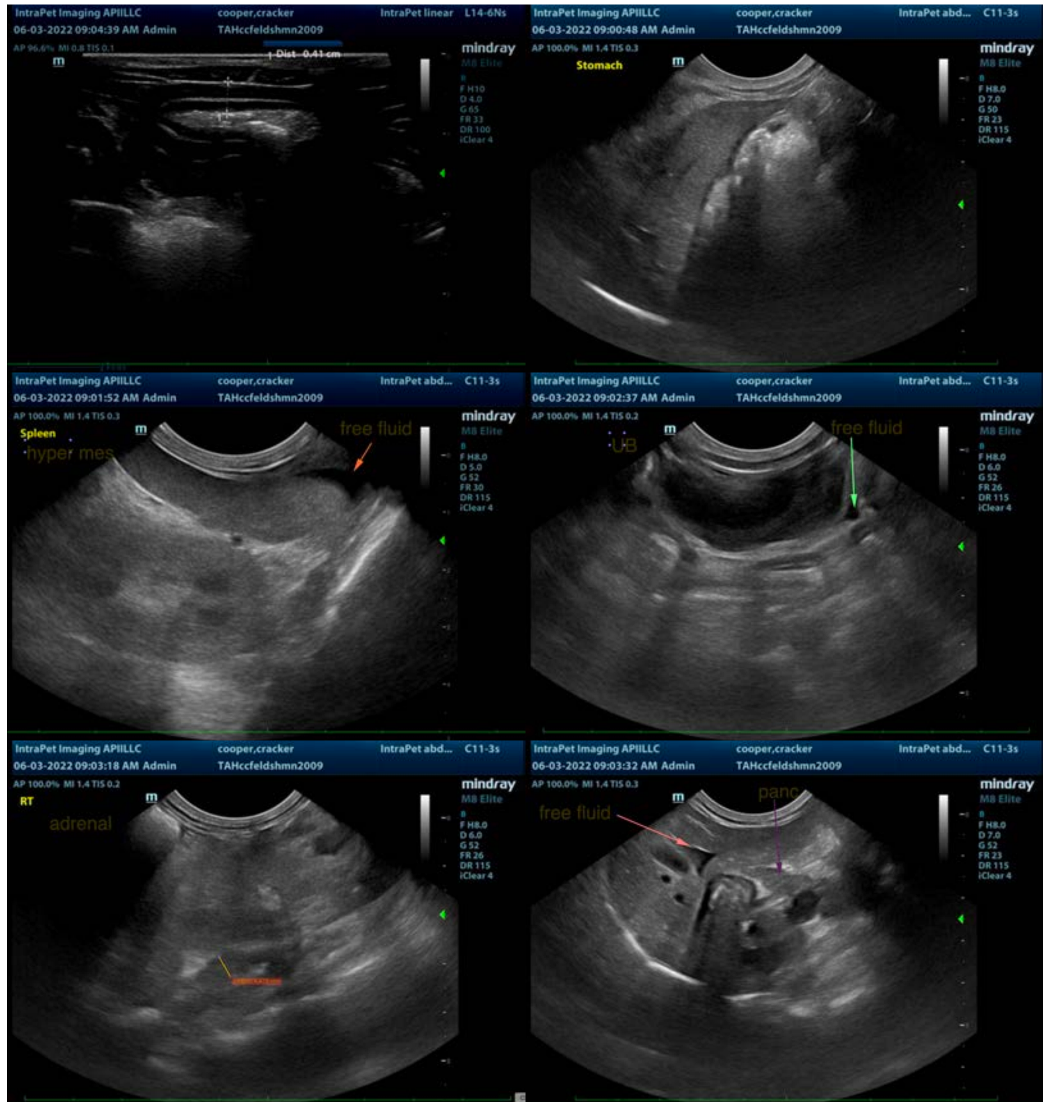

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Lisa Carioto, DVM, DVSc, Diplomate AVIM

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