IMAGING PERFORMED BY

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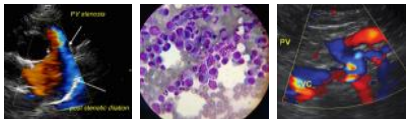

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

5/12/2022

PATIENT

Pepper Ziegler

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

4/30/2011

WEIGHT

16.4 lbs

INTERPRETED BY

Andrea Nicastro, DMV, Diplomate DACVIM (Small Animal Internal Medicine)

HOSPITAL NAME

Eastern Animal Hospital

REFERRING VET

Dr. Warner-Jones

INVOICE

10892

PRESENTING CLINICAL SIGNS

Vomiting x 2 days, hx pancreatitis. Patient is recumbent, weak, fever 104.8, BP low.

Current Medications: JUST started Fluids, Cerenia,. buprenex
Lab Results: Chem pending, Abnormal FPL and CBC. Neutrophilis, bands suspected.
Radiographs: Abnormal cranial abdomen small kidneys.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Requested by DVM.
Imaging Performed By: Andi Parkinson, RDMS

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended. A scant amount of suspended echogenic debris is observed within the lumen. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The left kidney is normal size (4.07 cm in length); with a slightly irregular shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

The right kidney is normal size (4.15 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

Adrenal Glands

The left adrenal gland is mildly enlarged (0.56 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is normal size (0.42 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is normal in size (0.78 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

Liver

The liver is subjectively enlarged with irregular peripheral contours. A 3.5 cm irregular, heterogenous mass with cavitated areas is observed deep on the left side. The lesion causes capsular expansion. In addition, multiple multi-septated cystic masses (the largest measuring 4.62 cm in its longest dimension) are observed throughout the organ. The remaining parenchyma is mottled in appearance. Intrahepatic biliary stones are present. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion. The portal vein to caudal vena cava ratio is approximately 1: 1.

The gall bladder is moderately distended. The wall is normal in thickness. Mineralized sand and echogenic debris are observed within the lumen. The cystic and common bile ducts are severely dilated. The common bile duct measures up to 0.73 cm and contains echogenic debris and sand +/- distinct choledocholiths within the lumen. The duodenal papilla is severely thickened (0.81 cm in width).

Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

Pancreas

The left limb is enlarged with s irregular peripheral contours. The parenchyma is hypoechoic relative to surrounding omental fat. No distinct focal lesions are observed. The pancreatic duct is not overtly dilated. The mesentery effacing the serosal surface is hyperechoic.

Free Abdomen

There is no evidence of free fluid. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The pancreatic changes are consistent with moderate to severe acute or chronic active pancreatitis.
- There is at least partial obstruction of the common bile duct with sand +/- distinct choledocoliths. Gall bladder sand is also present.
- Multiple cystic hepatic masses. Top differentials include biliary cystadenoma and biliary cystadenocarcinoma. The more solid-appearing mass deep on the left side may also represent a biliary cyst adenoma/adenocarcinoma. Alternatively, another type of neoplasia or inflammatory focus is possible. Intrahepatic biliary stones are present and are likely incidental.

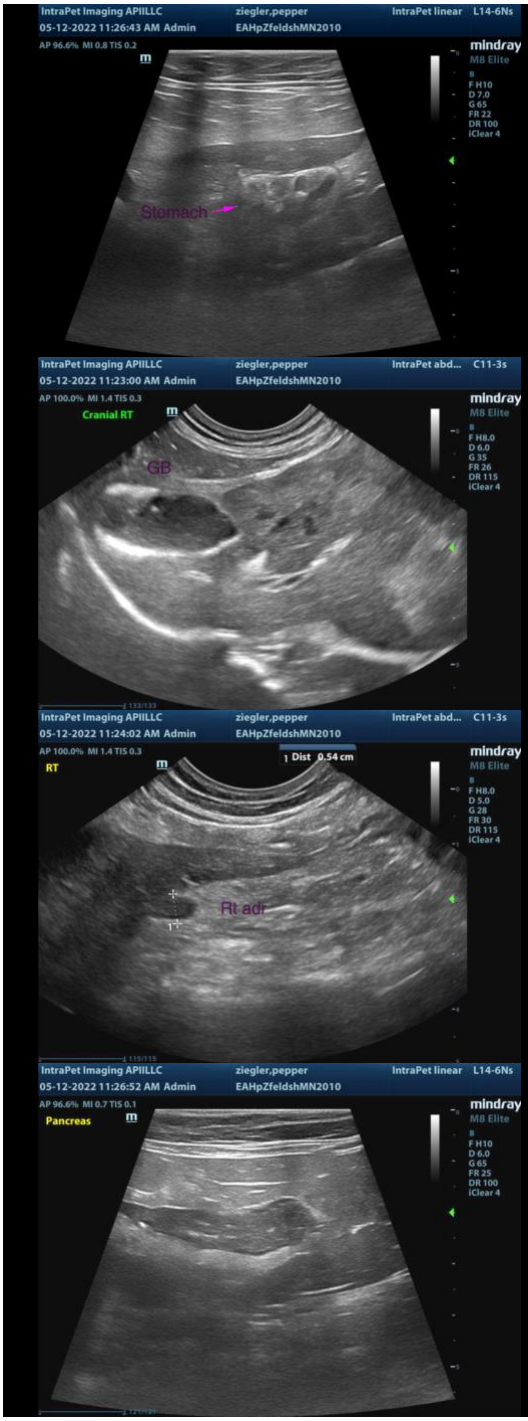
Secondary Findings

- Bilateral, age-related renal changes.
- The mild left adrenomegaly may be secondary to stress, hyperplasia or less likely, an emerging tumor.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Supportive care for pancreatitis/cholecystitis/cholangitis/cholangiohepatitis is recommended, including IV fluids, broad-spectrum antibiotic therapy and symptomatic care. Also consider fresh frozen plasma and nutritional support (i.e., via temporary feeding tube).
- Consider clotting times (i.e., PT/PTT) to assess coagulation status, particularly in the face of a partial bile duct obstruction and possible hepatopathy. If the patient's total bilirubin is elevated, it should be closely monitored. If increasing, an abdominal exploratory with assessment of bile duct patency may be warranted.
- Other considerations include the following:

    1. Thoracic radiographs to assess cardiopulmonary status
    2. Malabsorption panel, including serum cobalamin and folate, TLI and PLI
    3. Toxoplasmosis testing (IgM and IgG)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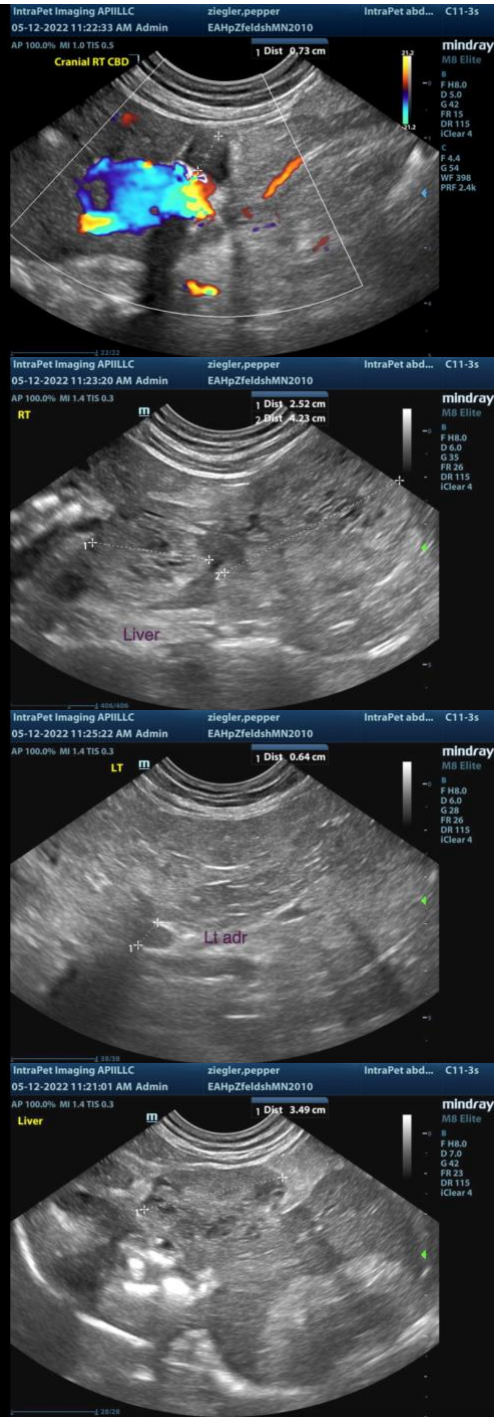
M8 Elite
Stomach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M8 Elite
RT
1 Dist 2.52 cm
2 Dist 4.23 cm
Liver

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Lt adr

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Pancreas

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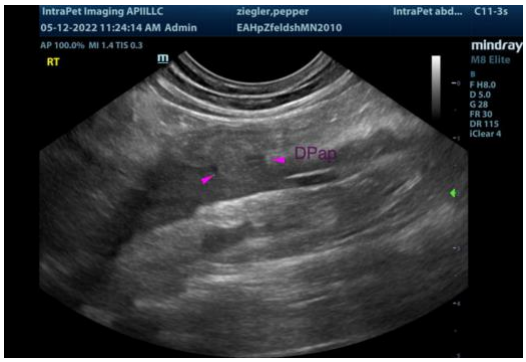
M8 Elite
Liver
1 Dist 3.49 cm



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.

Andrea Nicastro, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com