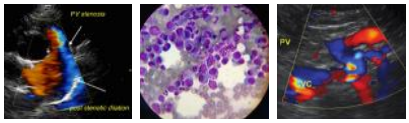
IMAGING PERFORMED BY

IntraPet.com



SonoPath
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DATE
7/25/22

PATIENT
Charlie Daley

SPECIES
Canine

BREED
Maltese Mix

SEX
Neutered Male

AGE
7/11/14

WEIGHT
10.8 Pounds

INTERPRETED BY
Beth Johnson, DVM DACVIM

HOSPITAL NAME
Animal Emergency Hospital

REFERRING VET
Dr. Kalwa

INVOICE
16538

PRESENTING CLINICAL SIGNS

History: 7/11 at AEH: anorexia; history of vomiting Thursday/Friday, no production of feces rDVM. 7/8 rDVM- cbc, chem, cpl, (nsf- have comments that it was nsf but no numbers***) x-rays opaque material in stomach. Liver values: 7/12: ALT 97, ALKP 1211, Tbili 0.7. 7/13: ALKP 1336. Not doing well - Recheck with rDVM- liver values- Wed - Not eating - Lethargy - Vomited once- GI diet (previously on raw) - Weight loss - Chews paws Readmission for pancreatitis, enlarged liver, enlarged gallbladder, lymph node enlarged, vomiting- yellow to brown, eating little - feeding GI diet. Moping, sad Recheck ALKP in 500s on Wednesday with rDVM.

Current Medications: Metronidazole, Denamarin, Ursodiol, Vitamin B, Maropitant, Ampicillin, Omeprazole.
Lab Results: See attached.
Radiographs: Lateral whole body - Hepatomegaly- caudal rotation of gastric axis; rounded liver lobes - Hazy cranial abdomen.
Date of Previous IntraPet Ultrasound: 7/12/22. See attached.
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 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 area of the prostate is examined without evident pathology.

Left kidney is normal is size (4.25 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.

Right kidney is normal is size (4.45 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

Left adrenal gland is normal in size (1.86 cm long x 0.55 cm at cranial pole and 0.49 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (1.43 cm long x 0.64 cm at cranial pole and 0.31 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

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). Mild parenchymal remodeling with diffusely mildly coarse architecture and increased portal markings is present. No focal nodules or masses are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

Gastrointestinal

The visible stomach wall is normal in thickness 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. 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 is prominent (enlarged) in size, hypoechoic to surrounding tissue and irregular in shape with a swollen undulating contour. Enhanced hyperechoic ill-defined surrounding fat is noted.

Free Abdomen

A small amount of anechoic free fluid and enhanced hyperechoic mesentery noted in the cranial abdomen around the pancreas and liver. Portal lymph nodes are prominent in size with swollen capsular contour. Normal elongated shape (length to width ratio) is maintained. There is no loss of parenchymal detail.

ULTRASONOGRAPHIC FINDINGS

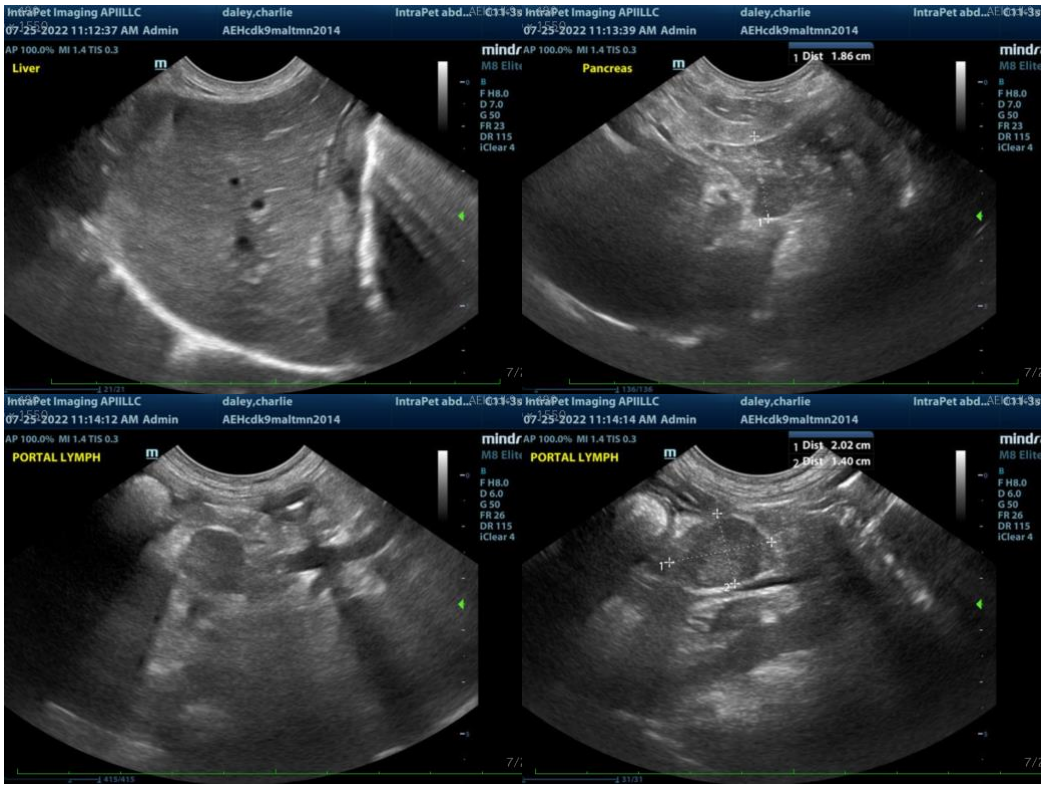
- Acute pancreatitis with suspicion for an acute on chronic flare-up
- Hypoechoic hepatomegaly-This appearance is consistent with an acute hepatopathy or acute cholangiohepatitis. Infiltrative neoplasia (round cell neoplasia) should also be considered.
- Reactive portal lymph nodes – infiltrative neoplastic disease cannot be ruled out but is considered less likely
- Gallbladder debris - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

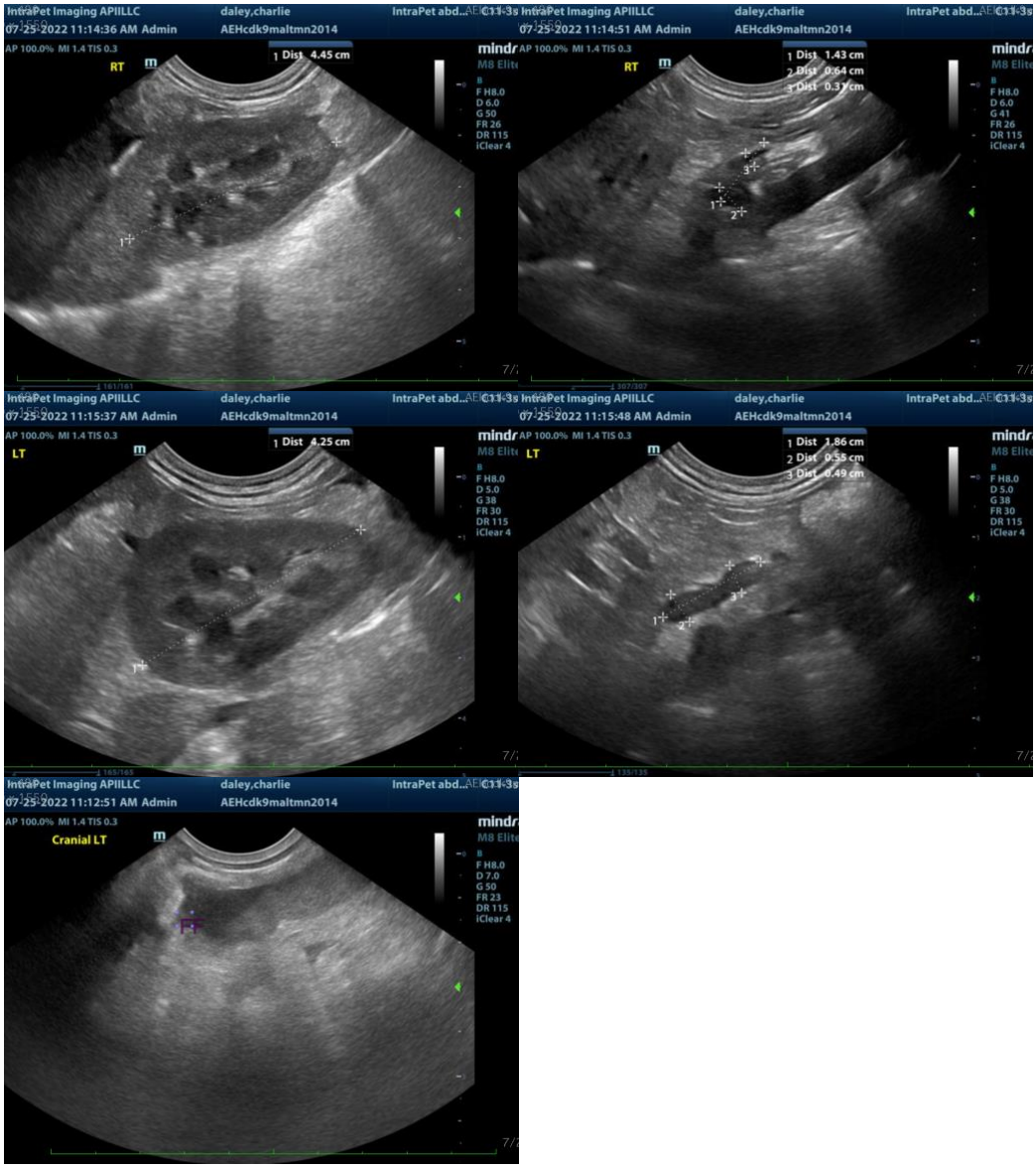
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The ultrasound images, at this time, have progressed compared to the previous ultrasound, with the progression appearing to be a progression of pancreatitis. However, given the reported liver and portal node changes, an acute hepatopathy/cholangiohepatitis, concurrently, is still considered likely.

Recommendations include:

- A quantitative PLI, for further assessment of the pancreas, if not recently evaluated.
- Testing for Leptospirosis is indicated, if not already evaluated.
- Given the progression in this patients liver enzymes, etc., a fine needle aspirate of both the liver and the enlarged portal node is recommended, if patients coagulation statis is appropriate.
- In the meantime, more aggressive management of suspected acute on chronic pancreatitis, combined with the acute hepatopathy, in the form of a fresh frozen plasma transfusion, if available, and even hyperbaric oxygen therapy, could potentially be beneficial.
- In addition to the routine antiemetics, gastroprotectants, appetite stimulants, or nutritional support (as needed), pain management, broad spectrum antibiotics and fluid therapy.





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