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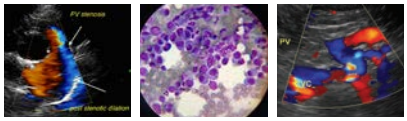
IntraPet.com



SonoPath

Clinical Sonography & Telecytology

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DATE

7/12/22

PATIENT

Phoenix Kulaga

SPECIES

Canine

BREED

Labrador

SEX

Neutered Male

AGE

3/14/15

WEIGHT

94.2 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Greenbrier Vet Clinic

REFERRING VET

Dr. Whitfield

INVOICE

39414

PRESENTING CLINICAL SIGNS

Decreased appetite, intermittent vomiting bile, lethargic for 2 weeks.

Current Medications: Famotidine 0.7 mg/kg q12 hrs for past two weeks
Lab Results: CBC, Chemistry, UA, thyroid, and 4dx tested. On initial testing Albumin was low at 2.0 and TP was just below normal. These returned to normal at recheck a week later. No other significant findings were observed on bloodwork.
Radiographs: chest and abdomen were within normal limits.
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 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.

Prostate (neutered) is normal in size, echotexture and echogenicity for a neutered male.

The right kidney is normal in size (6.43 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 (7.17 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 adrenal glands are small (flattened contour). Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. The left measures 3.4 cm long x 0.52 cm at the cranial pole and 0.71 cm at the caudal pole. The right measures 2.38 cm long x 0.75 cm at the cranial pole and 0.81 cm at the caudal pole.

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

The liver is normal to subjectively small in size with slightly undulating capsular contour. Parenchyma is diffusely heterogeneous, primarily hypoechoic, with increased portal markings and coarse architecture. No focal nodules or masses are observed. However, occasional patchy, ill-defined areas of slightly increased echogenicity are present. The visible vasculature and biliary tree appear normal without distinction or congestion.

The 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 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

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

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

Mesenteric 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

- Hepatic changes consistent with possible chronic inflammatory hepatopathy with some concern for early fibrosis, given the focal non-distinct, hyperechoic areas. Given the lack of liver enzyme increase, it could be that these changes are chronic scarring due to resolved past inflammatory episodes, or even normal patient variant. However, given the historically reported low albumin, the changes may be significant.

- Flat adrenal glands – This can be a normal patient variant and/or a sign of exogenous cortisol administration. If exogenous steroids are not being administered, hypoadrenocorticism (either relative or absolute) should be considered.

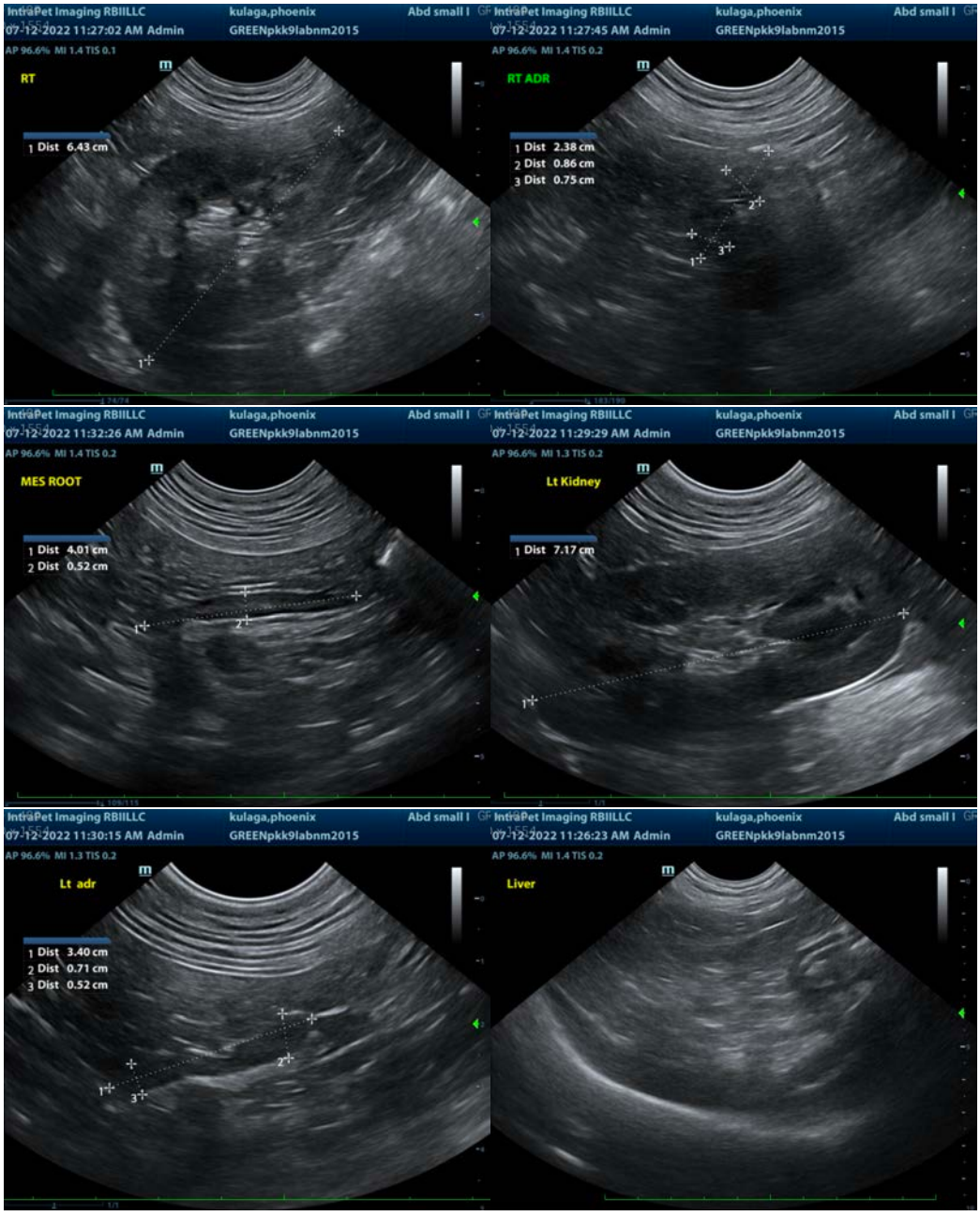
- Reactive mesenteric lymph nodes – infiltrative neoplastic disease cannot be ruled out but is considered less likely.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Top differential for hypoalbuminemia includes loss through the urine or GI tract, and a urinalysis was reportedly normal in this patient. Therefore, further assessment of gastrointestinal disease could be considered with a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory for further evaluation of GI and pancreatic function.

Decreased production due to early decreased liver function is also possible. Given the subjective findings in this patient's liver combined with the low albumin, bile acids testing is warranted to further assess liver function, if total bilirubin is normal.

Hypoadrenocorticism can also result in hypoalbuminemia, especially transient hypoalbuminemia. Therefore, a baseline cortisol is recommended. If baseline cortisol is less than 2, a full ACTH stimulation test is recommended to rule out hypoadrenocorticism.



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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