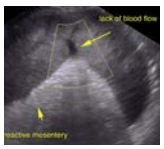
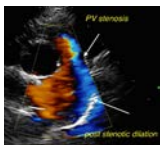
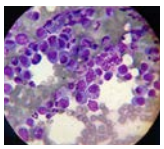
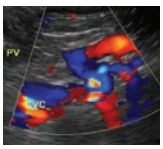

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PATIENT

Sophia See

SPECIES

Canine

BREED

Maltese

SEX

Spayed Female

AGE

11 Years

WEIGHT

12 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

Animal General on the Hudson

REFERRING VET

Dr. Daniel Tierney

INVOICE

38751

DATE

6/15/22

PRESENTING CLINICAL SIGNS

Patient's abdomen seems to have cranial organomegaly and blood work showed elevated liver values. Abnormal PE/Chem/CBC/UA Results: ALT 1177, ALP 1251, AST 134, BUN 38, BG 141, K+ 5.8, WBC 18.8, neuts. 14,100, PLTs 717, monos 1692. USG: 1.026.

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 (3.91 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 (4.07 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 plump/mildly swollen in size (1.58 cm long x 0.47 cm at the cranial pole and 0.40 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is plump/mildly swollen in size (1.88 cm long x 0.69 cm at the cranial pole and 0.69 cm at the caudal pole), 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

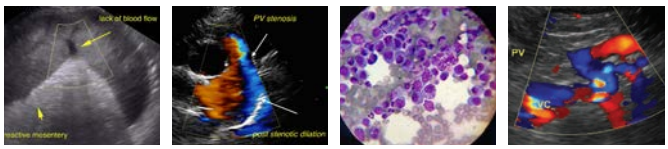
Liver is subjectively enlarged with rounded margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature appears normal.

The gallbladder is moderately distended with anechoic bile and some gravity dependent and suspended echogenic sediment. The wall is mildly irregular and hyperechoic, characterized by mucosal polypoid changes. There is no evidence of distention. There is no evidence of cystic or common bile duct dilation. There is no evidence of effusion or inflammation.

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 largely normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Houwever, duodenum is at upper end of normal range,



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so mildly thick with some mucosal echogenic speckling noted. 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 peritoneal effusion. There is no apparent lymphadenopathy.

ULTRASONOGRAPHIC FINDINGS

- Hyperechoic hepatomegaly – most consistent with benign steroid (endocrine) hepatopathy or reactive or idiopathic hepatopathy. Infiltrative neoplasia such as round cell neoplasia is also possible, but considered less likely.
- Bilateral adrenomegaly – consistent with adrenal hyperplasia secondary to pituitary depending hyperadrenocorticism vs normal variant.
- Polypoid gallbladder changes with debris.
- Mild duodenal thickening with mucosal speckling, which can be a non-specific indicator of inflammatory bowel disease. This finding should be interpreted in combination with clinical signs such as weight loss, vomiting, diarrhea, etc., as it can also be a normal patient variant, especially in a post-prandial study.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

This patient has changes consistent with possible hyperadrenocorticism including the heterogeneous liver, the mildly plump adrenal glands, the gallbladder debris, etc. Therefore, if clinical signs of hyperadrenocorticism are present, including PU/PD, panting, polyphagia, hair loss, etc., then testing for hyperadrenocorticism with a low-dose Dexamethasone suppression test could be considered.

However, increased liver enzymes secondary to hyperadrenocorticism does not typically cause such a marked increase in ALT. Therefore, recommendations include a fine needle aspirate of the liver for further investigation of possible infiltrative disease, if patient's coagulation status is appropriate.

Testing for Leptospirosis is recommended, if not recently evaluated.

Bile acids could be considered to further assess liver function.

Blood pressure is recommended if not recently evaluated, given the concern for possible hyperadrenocorticism.

If signs of gastrointestinal disease are present, including weight loss, vomiting, diarrhea, etc., then further evaluation of the gastrointestinal tract for possible infiltrative inflammatory bowel disease could be considered, beginning with malabsorption panel, including TLI, PLI, folate and cobalamin to Texas A&M GI laboratory.

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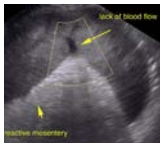
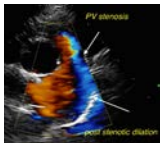
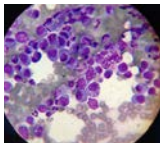
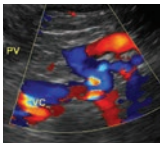

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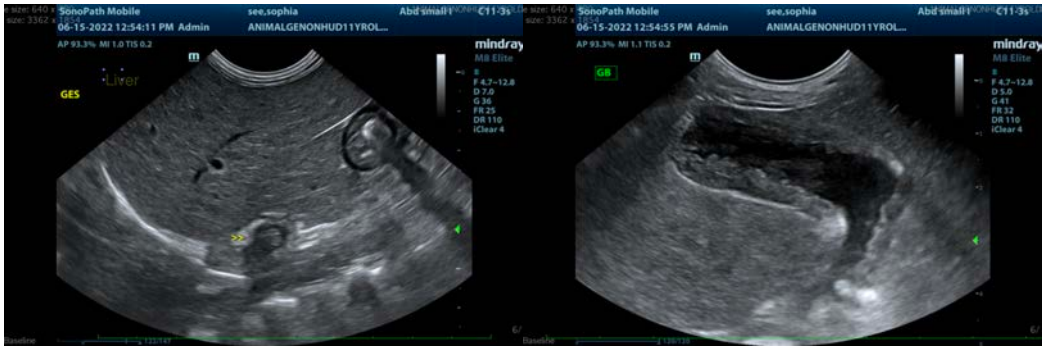

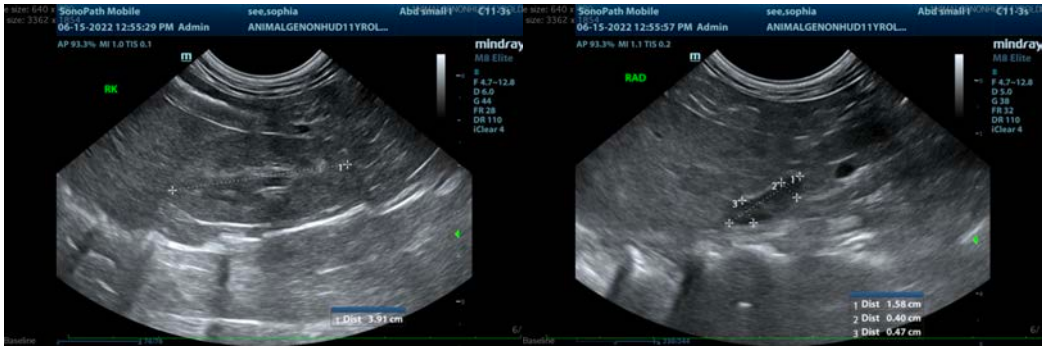

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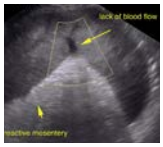
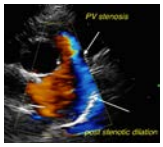
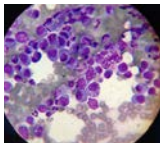
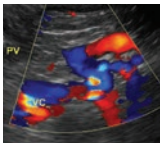

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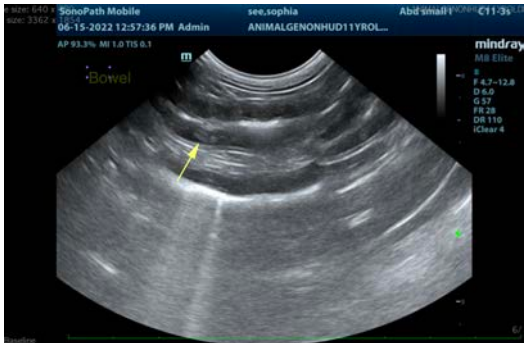

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Beth Johnson, DVM, DACVIM
Beth.Johnson@sonopath.com