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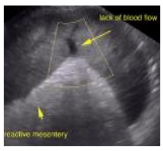
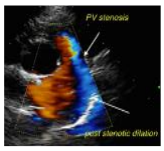
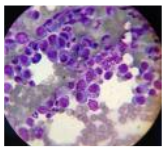
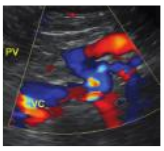

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1-800-838-4268 info@sonopath.com

PATIENT

Milo Gaboury

SPECIES

Canine

BREED

Border Collie X

SEX

Neutered Male

AGE

13 Years

WEIGHT

22.1 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Donna Markland, DVM

HOSPITAL NAME

Island Mobile Paws VS

REFERRING VET

Petroglyph AH

INVOICE

10009dc

DATE

12/3/21

PRESENTING CLINICAL SIGNS

History: PU/PD for about one year. Bloodwork in February 2021 was unremarkable, with the exception of a mild elevation in ALT. PE is unremarkable other than multiple SQ masses. Most have been aspirated and are consistent with lipomas. Repeat CBC/Chem on December 2 showed increased ALT (over 2.5 times value from February) and an increased ALP and cholesterol. UA shows borderline hyposthenuria/isosthenuria. Takes cartrophen for OA. No other medications.

Abnormal PE/Chem/CBC/UA Results: December 2, 2021 CBC= wnl Chem: ALT=420 U/L (10-125) ALP=465 U/L (23-212) Chol=10.1 mmol/L (2.84-8.26) UA: usg=1.007 pH=7.0 nsf on sediment

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 mildly distended with anechoic urine. 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 prostate is normal in size (1.35 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The left kidney presented normal size (5.61 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

The right kidney presented normal size (5.96 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

Adrenal Glands

The left adrenal gland is normal size (0.46 cm at cranial pole) (0.52 cm at caudal pole) (1.96 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is normal size (0.79 cm at cranial pole) (0.63 cm at caudal pole) (2.7 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is normal in size (2.02 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 prominent to enlarged with swollen peripheral contours. The parenchyma is similar in echogenicity relative to the spleen, and subtly mottled in appearance. No distinct focal lesions are observed. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

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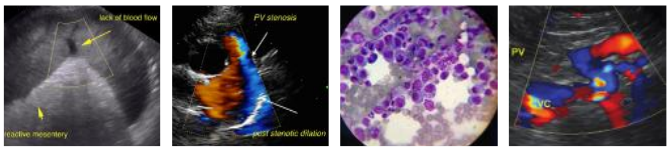

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The gall bladder is moderately distended. Several small, irregular polypoid-like lesions are arising from the luminal surface. A small amount of gravity-dependent echogenic debris is also present within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The gastric lumen is mildly distended with ingesta. The gastric wall is normal in thickness with a normal layering pattern. 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. There is no evidence of an obstructive pattern.

Pancreas

The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

Free Abdomen

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Non-specific diffuse hepatopathy. Differentials include inflammatory/immune-mediated disease, (i.e., bacterial cholangiohepatitis, chronic hepatitis), hepatotoxicity (i.e., copper), infiltrative neoplasia (less likely), +/- concurrent age-related change (i.e., vacuolar hepatopathy, regenerative nodular hyperplasia, age-related remodeling) or other hepatopathy.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Ideally, a surgical liver biopsy with aerobic and anaerobic bile cultures, and acquisition of additional hepatic tissue samples for copper quantitation would be performed to get a definitive diagnosis. A fine-needle aspirate of the liver can be performed as a more conservative step (if clotting status is appropriate). However, cytology results may not provide a definitive answer. If the client wishes to attempt medical management prior to hepatic tissue sampling, consider empirical treatment for bacterial cholangiohepatitis, with broad-spectrum antibiotics (i.e., Amoxicillin/Clavulanic acid), as well as antioxidant therapy +/- Ursodiol. If no improvement in the liver values is seen within 7-10 days of initiating therapy, antibiotics should be discontinued, and hepatic tissue sampling revisited.

- Pre- and post-prandial serum bile acids would be useful in assessing hepatic function.

- Also, in general, NSAID use should be avoided until the liver issue is diagnosed and resolved.

- Given the patient's age, three-view thoracic radiographs are recommended to assess cardiopulmonary status, particularly if the patient is to undergo general anesthesia.

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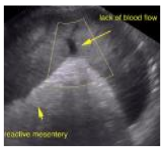
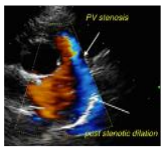
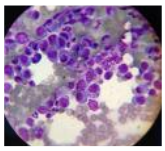
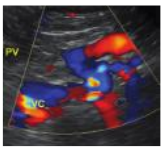

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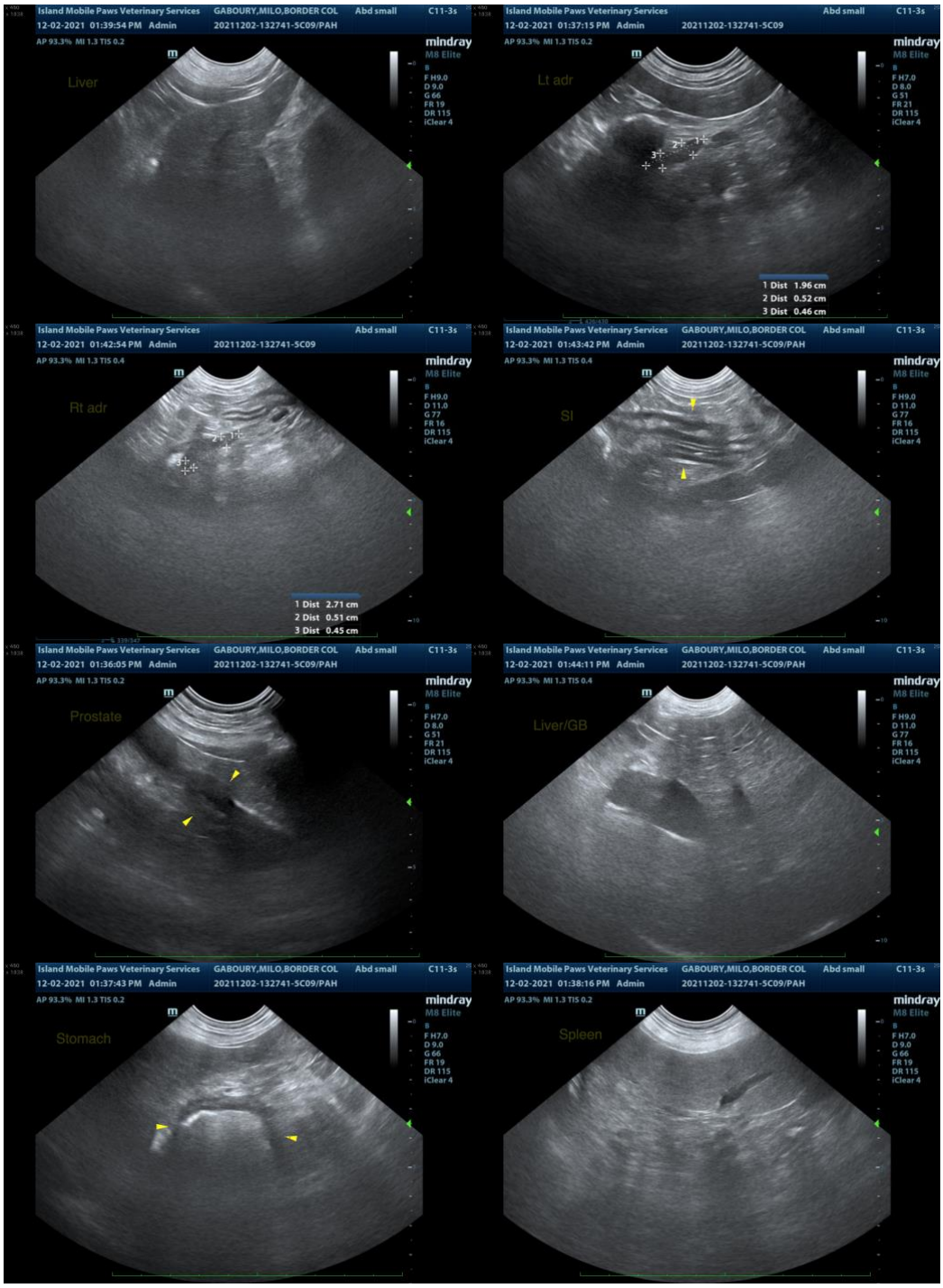

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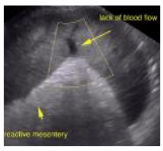
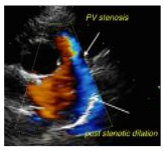
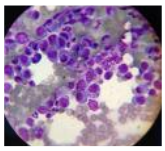
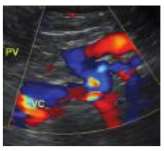

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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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)
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