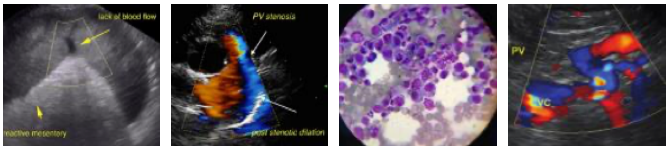
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT
Grommet Schlitzkus

SPECIES
Canine

BREED
Mixed breed

SEX
Male, neutered

AGE
14 Yrs.

WEIGHT
29.6 lbs.

INTERPRETED BY
Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

IMAGING PERFORMED BY
Dr. Lucas Budden

HOSPITAL NAME
Frontier VH

REFERRING VET
Dr. Lucas Budden

INVOICE
14373

DATE
12/19/22

PRESENTING CLINICAL SIGNS

History: Recent blood work shows ALT and ALP elevations at annual appointment. At night seems to get confused now. Current medications include Adequan, Rimadyl, joint supplement, and Pepcid. Ultrasound to further assess cause of ALT/ALP elevations.
Abnormal PE/Chem/CBC/UA Results: cbc/chem/T4/UA/fecal 12/2/2022 Fecal no parasites seen ALT elevated 206 prior to hepatic versus secondary inflammatory Alkaline phosphatase 260 rule out primary hepatic, secondary metabolic, vacuolar hepatopathy Magnesium elevated 2.8 nsf Cholesterol 454 with a postprandial Triglycerides elevated 2670 rule out postprandial Rest of CBC CHEM WNL Heartworm test negative Urine specific gravity 1.045, trace proteinuria but likely nsf due to concentrated urine, rest of urine sediment nsf T4 normal 1.3

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder and visible portion of the pelvic urethra are normal for the degree of luminal distension. The urine is anechoic with no evidence of debris. Cystic calculi and discrete masses are not observed. The region of the trigone and the visible portion of the proximal urethra are normal.

The prostate is normal in size (0.83 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The left kidney is normal size (5.22 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

The right kidney is normal size (5.14 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

Adrenal Glands

On still image of the left adrenal gland is available for interpretation. The left adrenal gland is normal size (0.50 cm at cranial pole) (0.52 cm at caudal pole); 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.

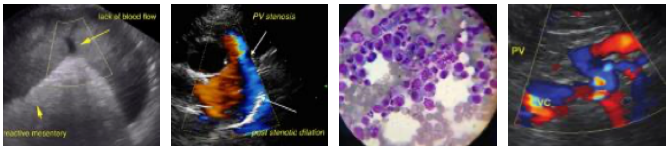
One still image of the right adrenal gland is available for interpretation. The right adrenal gland is normal size (0.54 cm at cranial pole) (0.44 cm at caudal pole); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is normal in size (1.02 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. A few myelolipomas are observed in the region of the hilus. Splenic vasculature is normal.

Liver

The liver is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative or



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regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed. The gallbladder is of normal contours and contains some dependent echogenic debris. The wall is normal in thickness. No choleliths are observed. The cystic and common bile ducts are normal.

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 ileocecocolic junction and colonic wall are normal. No obstructive disease is noted.

Pancreas

The right limb of the pancreas is normal in size with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic 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:

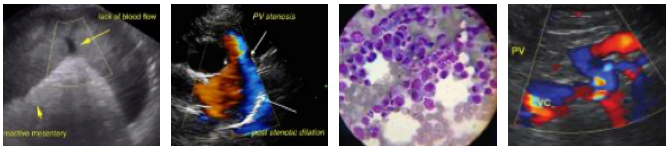
- An obvious cause for the elevated liver enzymes is not identified in the study. However, a microscopic hepatopathy (i.e., bacterial cholangiohepatitis, Leptospirosis, chronic active hepatitis, copper-associated hepatotoxicity, reactive hepatopathy, infiltrative neoplasia (less likely)) should be considered.

Secondary Findings:

- Bilateral chronic age-related renal changes.
- Age-related pancreatic remodeling.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- If a conservative approach is desired, consider non-invasive testing (i.e., pre and post prandial serum bile acids) +/- Leptospirosis testing (i.e., blood and urine PCR, serology) with hepatic antioxidant treatment and serial monitoring (i.e., every 2-3 months) of the patient's liver values to assess for progression.
- If a more aggressive approach is desired, consider the above diagnostics/treatments along with hepatic tissue sampling. Laparoscopic or surgical biopsies are more likely to be rewarding in terms of a definitive diagnosis. If pursued, aerobic and anaerobic bile cultures along with



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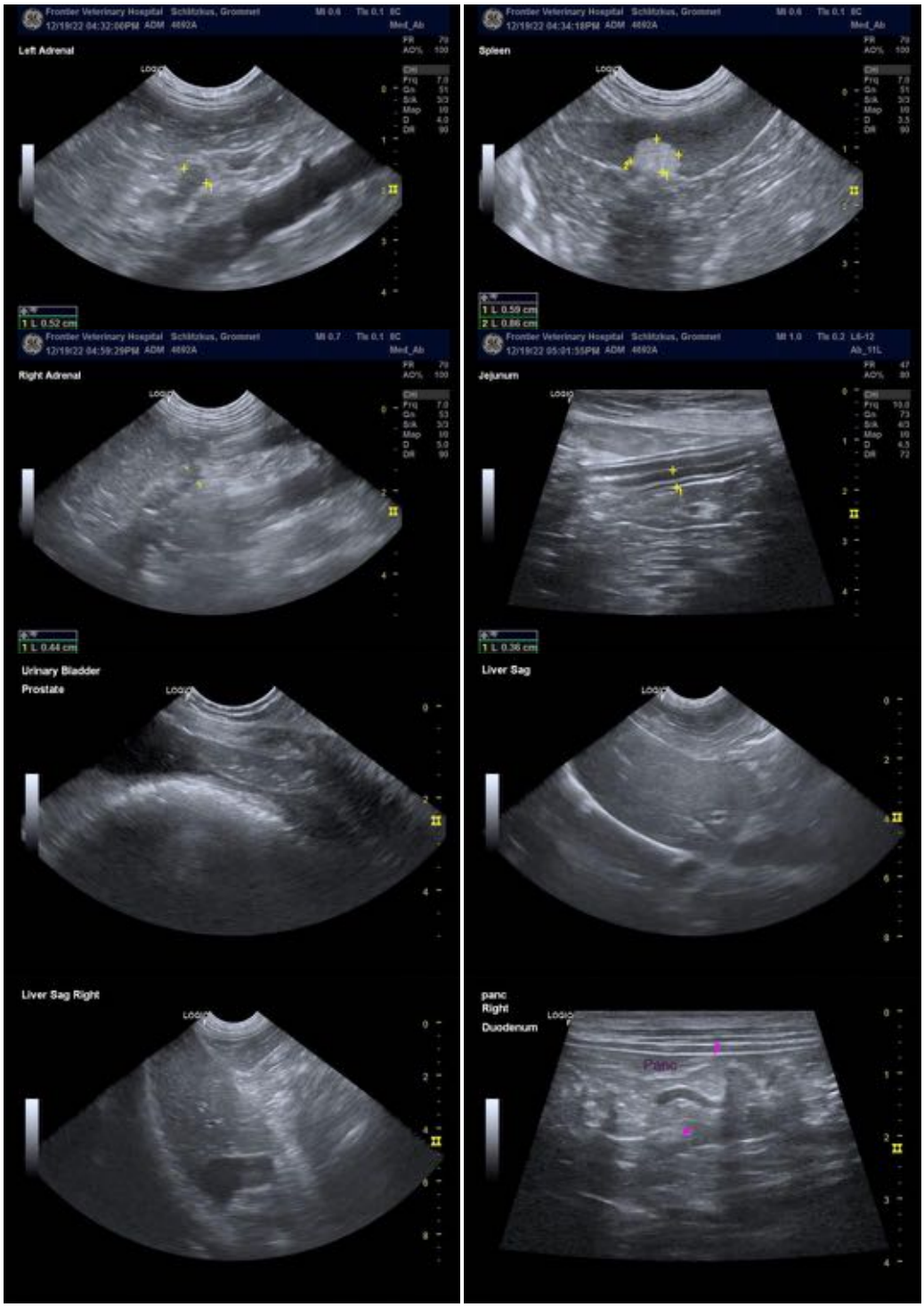
hepatic copper quantitation are recommended. Clotting times and thoracic radiographs should be performed prior to anesthesia.



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.

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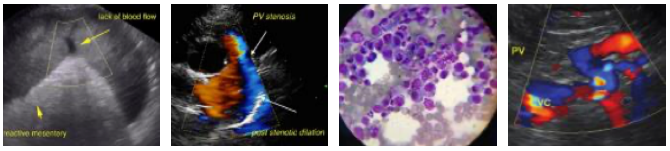

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Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

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info@SonoPath.com