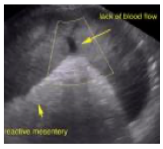
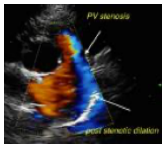
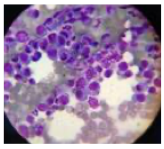
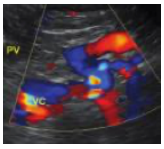
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT

George Mumper

SPECIES

Canine

BREED

Havanese

SEX

Neutered Male

AGE

11 years

WEIGHT

20.5 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Marti Williams

HOSPITAL NAME

Limestone VH

REFERRING VET

Marti Williams

INVOICE

13345

DATE

6.14.23

PRESENTING CLINICAL SIGNS

History: Clinically normal. Increasing ALT, GGT and SAP, more than expected for Cushing's.

Abnormal PE/Chem/CBC/UA Results: ALT 468, SAP 2086, GGT 22, Choles 639, CBC NSF. Most recent UA pending

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. Luminal contents are anechoic. No cystic calculi are observed. The region of the trigone and visible portion of the proximal urethra are normal.

The region of the prostate is not visualized due to its pelvic location.

The left kidney is normal in size (4.42 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis.

The right kidney is normal in size (4.76 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis.

Adrenal Glands

The left adrenal gland is normal in size (0.42 cm at cranial pole) (0.47 cm at caudal pole) with a normal shape and 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 region of the right adrenal gland is evaluated. No obvious pathology is observed in this region.

Spleen

The spleen is normal in size (1.01 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 appears normal.

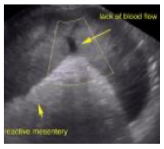
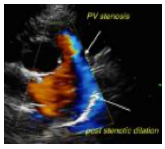
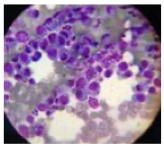
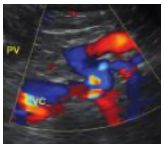
Liver

The liver is subjectively enlarged with slightly swollen peripheral contours. The parenchyma is isoechoic- to slightly hypoechoic relative to the spleen and diffusely homogeneous in appearance. No distinct focal lesions are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion.

The gall bladder is of normal contours and contains some dependent echogenic debris. The wall is normal in thickness. No cholelithes are observed. The cystic and common bile ducts are normal/not seen.

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 is normal in thickness with a normal layering pattern and appropriate mural

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detail. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

Pancreas

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely hyperechoic 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

- The hepatic parenchymal changes could be consistent with vacuolar hepatopathy (i.e., idiopathic/endocrine), inflammatory disease (i.e., chronic hepatitis, bacterial cholangiohepatitis), hepatotoxicosis (i.e., copper), infiltrative neoplasia (less likely), other hepatopathy.

Secondary Findings

- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- Minor bilateral renal changes with subtle dystrophic mineralization

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Consider pre-and postprandial serum bile acids to assess hepatic function.
- Also consider Leptospirosis testing (i.e., blood and urine PCR, serology), particularly if the ALT elevation is more acute in nature.
- Hepatic tissue sampling (i.e., aspiration or biopsies) may be necessary to get a definitive diagnosis. If biopsies are pursued, aerobic and anaerobic bile cultures are recommended, and hepatic copper quantitation should be performed.
- If a more conservative approach is desired, consider empirical treatment for cholangiohepatitis with amoxicillin-clavulanic acid along with hepatic antioxidants. If liver values do not begin to improve within 7-10 days of initiating therapy, antibiotics should be discontinued and hepatic tissue sampling reconsidered. If values do improve, a 4–6-week course of treatment is recommended.
- If the patient has clinical signs of Cushing's disease, consider further testing (i.e., low-dose dexamethasone suppression test).

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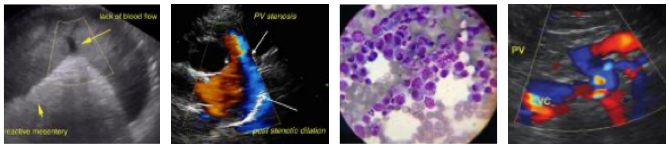

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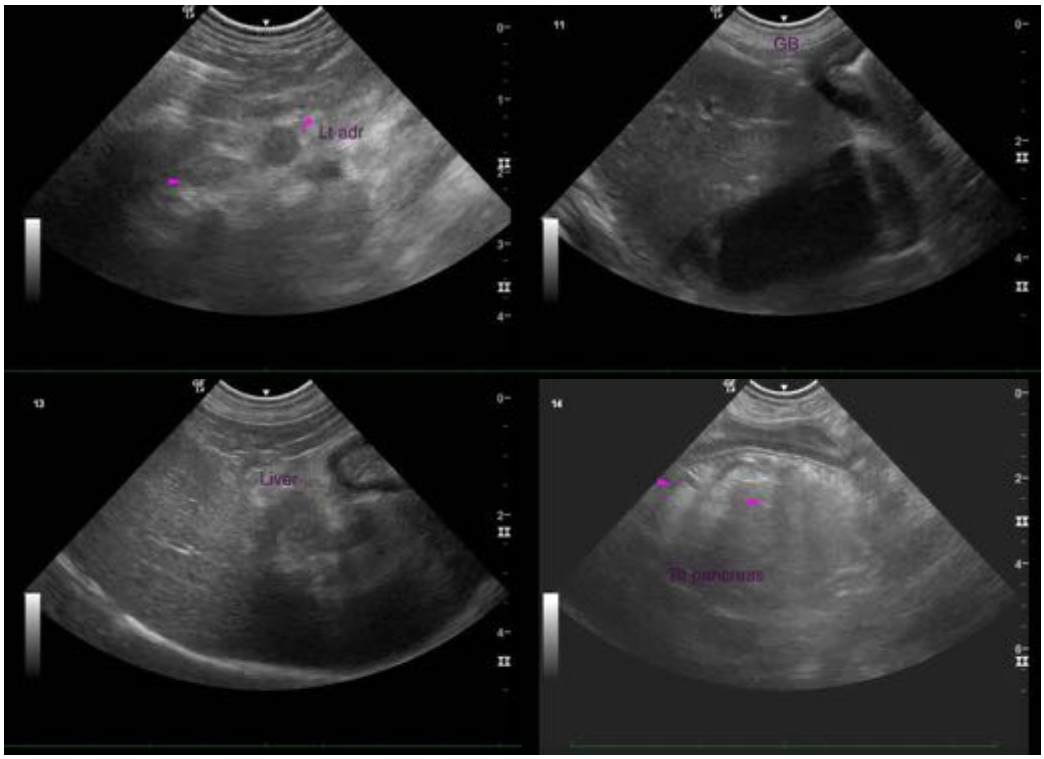

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
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