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Clinical Sonography & Telecytology
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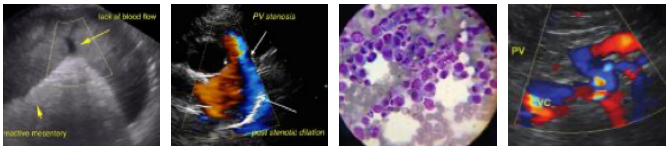

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1-800-838-4268 info@sonopath.com

PATIENT
Neville Wildenhaus

SPECIES
Canine

BREED
Chihuahua mix

SEX
Male, neutered

AGE
15 Yrs.

WEIGHT
17 lbs.

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

IMAGING PERFORMED BY
Dr. Goodman

HOSPITAL NAME
Evandale Blue Ash PH

REFERRING VET
Dr. Goodman

INVOICE
14927

DATE
5/9/23

PRESENTING CLINICAL SIGNS

History: Diagnosed with Cushing's 3/19/2019 and has been on varying doses of Vetoryl since. Current Vetoryl dose is 5mg in the morning with food. He has been on this dose since 2/2023. Currently on Enalapril 10mg (1/4 tab BID) and doing well on it. Performed preventative bloodwork 3/2023 which showed an increase in his ALP and ALT along with a UTI. Started on amoxi tri clav for 2 weeks and rechecked values. UTI resolved but his ALP and ALT had increased again. We have been monitoring these changes since 2019. Owner reports he is still doing well at home, e/d normally and no concerns.

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 the proximal urethra, visible to a depth of 2 cm, are normal.

The prostate is normal in size (0.91 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 (4.66 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. The cortex is isoechoic relative to the spleen. There is mild to moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. Foci of mineralization are observed within the cortex. A few small non-obstructive nephroliths are visualized. A few small cortical cysts are also seen. There is no evidence of pyelectasia, infarcts or hydroureter.

The right kidney is normal in size (4.37 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. The cortex is isoechoic relative to the spleen. There is mild to moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. Foci of mineralization are observed within the cortex. A few small non-obstructive nephroliths are visualized. A few small cortical cysts are also seen. There is no evidence of pyelectasia, infarcts or hydroureter.

Adrenal Glands

The left adrenal gland is enlarged (0.51 cm at cranial pole) (0.61 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.

The right adrenal gland is mildly enlarged (1.09 cm at cranial pole) (0.61 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 (1.10 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

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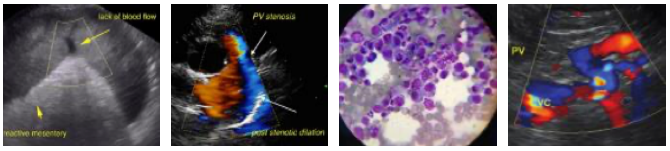

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The liver is subjectively enlarged with slightly swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely homogeneous in appearance. No distinct focal lesions are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is thin and smooth. Luminal contents are anechoic. 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 minimally distended with gas and chyme. 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 colonic wall is normal. No obstructive disease is noted.

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:

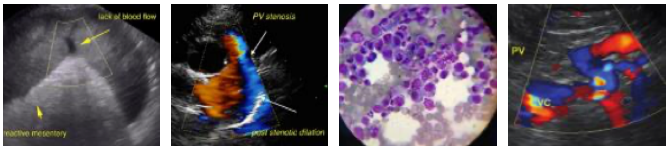
- The hepatic parenchymal changes are non-specific and could be secondary to vacuolar hepatopathy (i.e., idiopathic, endocrine), inflammatory disease (i.e., chronic hepatitis, bacterial cholangiohepatitis), hepatotoxicosis, Leptospirosis, infiltrative neoplasia (less likely), other hepatopathy.
- Gallbladder debris, non-mucocele.

Secondary Findings:

- Bilateral chronic nephropathy with non-obstructive nephrocalcinosis.
- Mild bilateral adrenomegaly, consistent with a previous diagnosis of pituitary dependent hyperadrenocorticism.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- To further evaluate for underlying hepatic disease, consider the following:
- Pre- and postprandial serum bile acids
- Leptospirosis testing (i.e., blood and urine PCR, serology), particularly if the clinical suspicion for disease is high.



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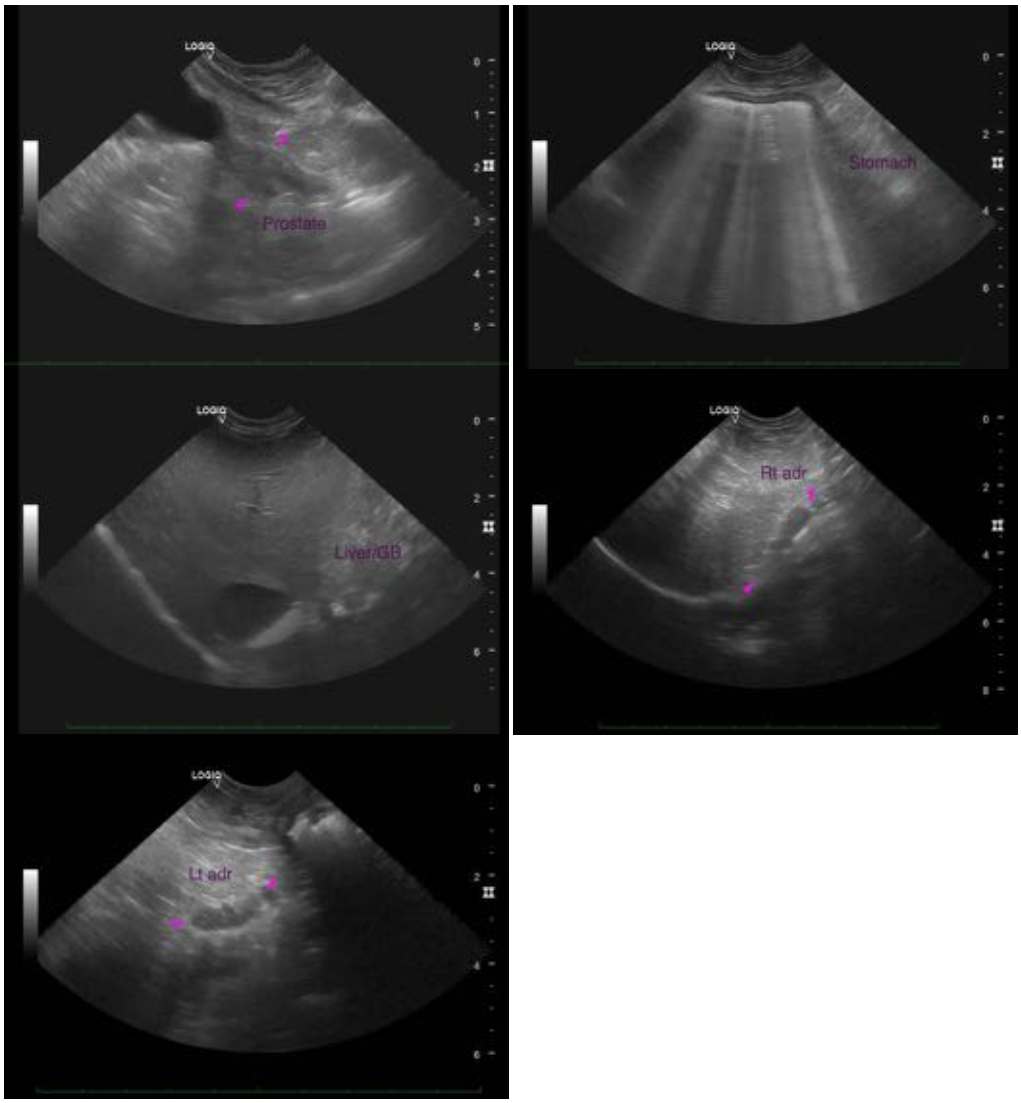
- Liver aspirate (if clotting status is normal). A 25-gauge needle should be used. If cytology results are inconclusive and an aggressive approach is desired, laparoscopic or surgical liver biopsies can be obtained along with aerobic and anaerobic bile cultures and hepatic copper quantitation. If hepatic tissue sampling is not pursued at this time, consider empirical treatment for bacterial cholangiohepatitis or rechecking liver values in 3-4 weeks to assess for progressive elevations. Initiation of a hepatic antioxidant (i.e., Denamarin) can also be considered.



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.

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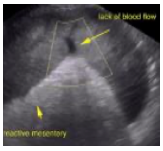
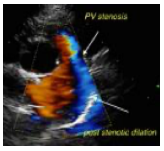
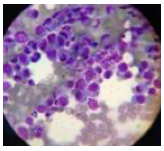
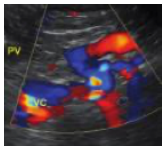

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