

**DATE PRESENTING CLINICAL SIGNS**

8.8.2022 Early idiopathic vacuolar hepatopathy vs CBD side effect vs chronic hepatopathy w/atypical enzymology vs less likely hypertriglyceridemia, other

PATIENT Further diagnostic and treatment recommended are to be implemented by Dr. Cara Steele.
8/8/22

Gemma Cabigon

ALP elevation. First noted in Sept 2021, has been mildly progressive since then, no response to Denamarin. Clinically well. Normal bile acids.

SPECIES

Canine

Current Medications: CBC drops daily.

Lab Results: ALP 494 7/6, CBC unremarkable

History of 1+ proteinuria in concentrated urine Sept 2021, UA/UPC pending.

BREED

Yorkshire Terrier

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

SEX

Spayed Female

Imaging Performed By: Andi Parkinson, BS, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**AGE**

12/5/14

Urinary System

The **urinary bladder** is moderately distended. The wall is normal in thickness with a smooth mucosal surface. A 0.21 cm cystic calculus (or aggregation of mineralized sand) is observed within the lumen along with a scant amount of suspended, echogenic debris. The region of the trigone and the proximal urethra, visible depth of 2 cm, are normal.

WEIGHT

7.6 kg

The **left kidney** is normal size (4.02 cm in length); with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild to moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. A few, nonobstructive nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydronephrosis.

INTERPRETED BY

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

The **right kidney** is normal size (4.42 cm in length); with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild to moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. A few, nonobstructive nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydronephrosis.

HOSPITAL NAME

Nexus Veterinary
Specialists

Adrenal Glands

The **left adrenal gland** is mildly enlarged (0.52 cm at cranial pole) (0.64 cm at caudal pole) (1.51 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.

REFERRING VET

Dr. Steele

The **right adrenal gland** is mildly enlarged (0.72 cm at cranial pole) (0.65 cm at caudal pole) (1.89 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.

INVOICE

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Spleen

The **spleen** is normal in size (1.16 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 in size with normal curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits subtle heterogeneity. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion. The portal vein to caudal vena cava ratio is approximately 1: 1.

The **gall bladder** lumen is moderately distended. The wall is thin and smooth. A scant amount of aggregated, echogenic, suspended debris is observed within the lumen. 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 segmentally dilated with chyme. 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 right limb of the **pancreas** is visible 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

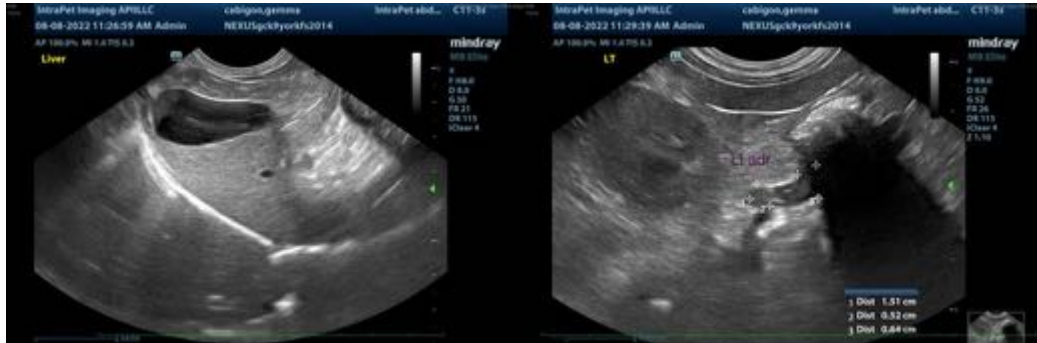
- The hepatic parenchymal changes are most consistent with a benign process (i.e., regenerative nodular hyperplasia and/or vacuolar hepatopathy). In light of the normal ALT, inflammatory disease and hepatotoxicity are considered less likely. Infiltrative neoplasia is possible, but also considered unlikely given the sonographic appearance of the liver.
- Cystic calculus versus aggregation of mineralized bladder sand

Secondary Findings

- Age-related pancreatic remodeling
- Mild, bilateral adrenomegaly . This may be secondary to early hyperplastic change or may be a normal variant for this patient.
- Bilateral, chronic age-related renal changes with dystrophic mineralization and left nonobstructive nephrolithiasis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Further diagnostic and treatment recommendations are to be implemented by Dr. Cara Steele.



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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