

**DATE PRESENTING CLINICAL SIGNS**

2/28/23

Presented for evaluation of oral mass and pre-dental bloodwork on 2/14/23. History of mild mitral regurgitation and grade 2/6 murmur, still consistent at exam. Overall, no change in health otherwise: history of osteoarthritic symptoms. Bloodwork revealed elevating liver values.

PATIENT

Ginger Nachodsky

Current Medications: Rimadyl 50mg: q12-24 hours, chronic medication (no changes made yet).

Lab Results: 2/14/23: CBC--WNL. CHEM--hypochloremia 105, elevated liver values---ALT- 267 (prev 146, 124), AST 73 (prev 41/normal). UA pending. T4--2.7 WNL.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Patient sedated with Torbugesic.

Stat Report: Not requested.

Imaging Performed By: Andi Parkinson, BS, RDMS.

SPECIES

Canine

BREED

Labrador mix

SEX

Female, spayed

AGE

10/28/2012

WEIGHT

57 lbs.

INTERPRETED BY

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

HOSPITAL NAME

Perry Hall AH

REFERRING VET

Dr. Breidenbaugh

INVOICE

14665

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder wall is 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. The region of the trigone and the visible portion of the proximal urethra are normal.

The left kidney is normal in size (6.54cm 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. There is no evidence of pyelectasia, infarcts or hydronephrosis.

The right kidney is normal size (6.53 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. There is no evidence of pyelectasia, infarcts or hydronephrosis.

Adrenal Glands

The left adrenal gland is mildly enlarged (0.50 cm at cranial pole) (0.88 cm at caudal pole) (3.30 cm in length) with a prominent caudal pole. A 0.93 x 0.81 cm hyperechoic nodule is observed at the caudal aspect. The glandular echogenicity and detail at the cranial aspect are unremarkable. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is mildly enlarged (1.56 cm at cranial pole) (0.83 cm at caudal pole) (3.15 cm in length) with a prominent cranial pole. A 1.54 x 1.44 cm hyperechoic nodule is observed at the cranial aspect. The glandular echogenicity and detail at the caudal aspect are unremarkable. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is normal in size (1.97 cm in width at the level of the hilus) with a normal capsular contour. The parenchyma is subtly mottled in appearance. No focal lesions are observed. Splenic vasculature is normal.

Liver

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits mild heterogeneity. No distinct focal lesions are observed. Hepatic vasculature 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. A small amount of echogenic debris/sludge is observed within the lumen, some of which is gravity-dependent and some of which is suspended. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The gastric lumen is minimally fluid distended. 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. A 2.12 cm medial iliac lymph node is visualized. The node is normal in shape and echogenicity.

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 (less likely given the chronicity), chronic active hepatitis, copper-associated hepatotoxicity, infiltrative neoplasia (less likely)) should be considered.

Secondary Findings:

- Bilateral chronic renal changes with subtle dystrophic mineralization.
- The bilateral adrenal nodules could be consistent with benign nodular hyperplasia or emerging tumors.
- The splenic parenchymal changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis, splenitis or antigenic stimulation with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Given the patient's breed and rising ALT, a liver biopsy with aerobic and anaerobic bile cultures as well as hepatic copper quantitation is recommended, particularly to assess for chronic hepatitis and copper hepatotoxicosis. Prior to surgery, three-view thoracic radiographs and clotting times should be performed.
- With regard to anesthesia, Benzodiazepines should be avoided and opioids used judiciously.



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.

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