

**DATE**

4/28/2022

PATIENT

Adam Gerard

SPECIES

Canine

BREED

Labrador

SEX

Neutered Male

AGE

11/1/2009

WEIGHT

74 lbs

INTERPRETED BY

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

HOSPITAL NAME

Healing Paws
 Veterinary Wellness
 Center

REFERRING VET

Dr. Levitsky

INVOICE

10829

PRESENTING CLINICAL SIGNS

Geriatric Labrador with hx of arthritis and suspected low grade laryngeal paralysis dz. Hx of several months of elevated liver enzymes but dog is eating ok and weight stable. No reported PU/PD or panting.

Current Medications: Joint supplements, Tylenol 325 mg for 1 month in Feb, Amantadine.
 Lab Results: 4/21 ALKP 133, 12/21 ALKP 201, ALT 56, 4/22 ALKP 423, ALT 170, T4 1.7, FT4 9 (7.7-47.6).
 Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The prostate is normal in size (1.29 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The left kidney presented normal size (7.41 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. A 0.68 cm cortical cyst is observed at the caudomedial aspect. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

The right kidney presented normal size (7.38 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 hydronephrosis. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal size (0.79 cm at cranial pole) (0.74 cm at caudal pole) (2.86 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.

The right adrenal gland is normal in size (1.23 cm at cranial pole) (0.86 cm at caudal pole) (3.47 cm in length); with a normal shape and smooth peripheral contours. A 1.07 x 0.60 cm hyperechoic nodule is observed at the cranial pole. Glandular echogenicity and detail at the caudal pole are normal. 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. A light micronodular pattern is observed throughout the parenchyma. 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 slightly mottled/heterogenous 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.

Gastrointestinal

The gastric lumen is not distended. The gastric in the region of the fundus is normal in thickness with a normal layering pattern. In the region of the pyloric antrum, the wall is thickened (up to 2.03 cm), irregular and hypoechoic, with a suspected loss of the normal layering pattern. The mesentery effacing the serosal surface in this region is hyperechoic. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. The colonic wall is normal. No obstructive or overt infiltrative 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

There is no evidence of free fluid. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

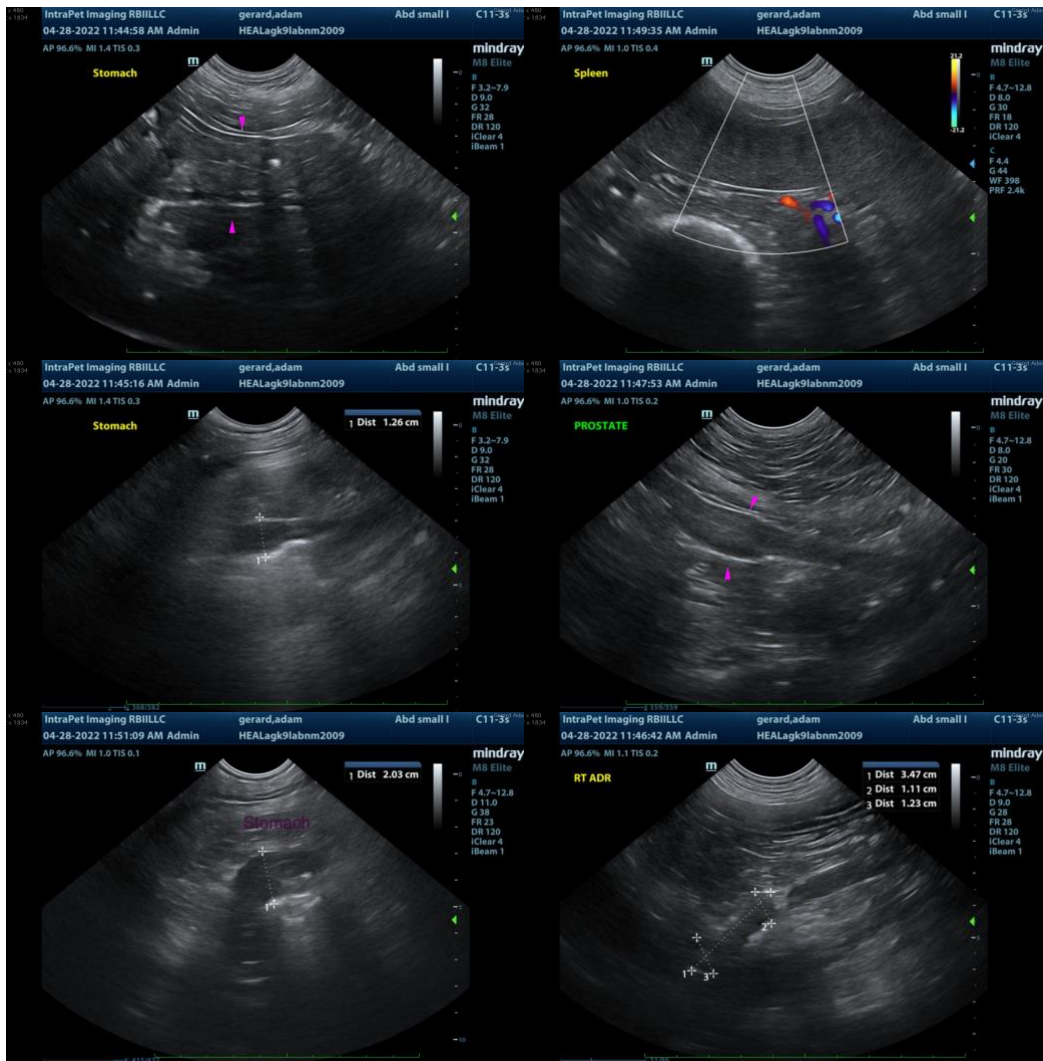
- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely.
- The pyloric antral wall changes are concerning for infiltrative neoplasia (i.e., lymphoma, adenocarcinoma). However, an inflammatory process or hypertrophy cannot be completely excluded. Adjacent peritonitis is suspected.

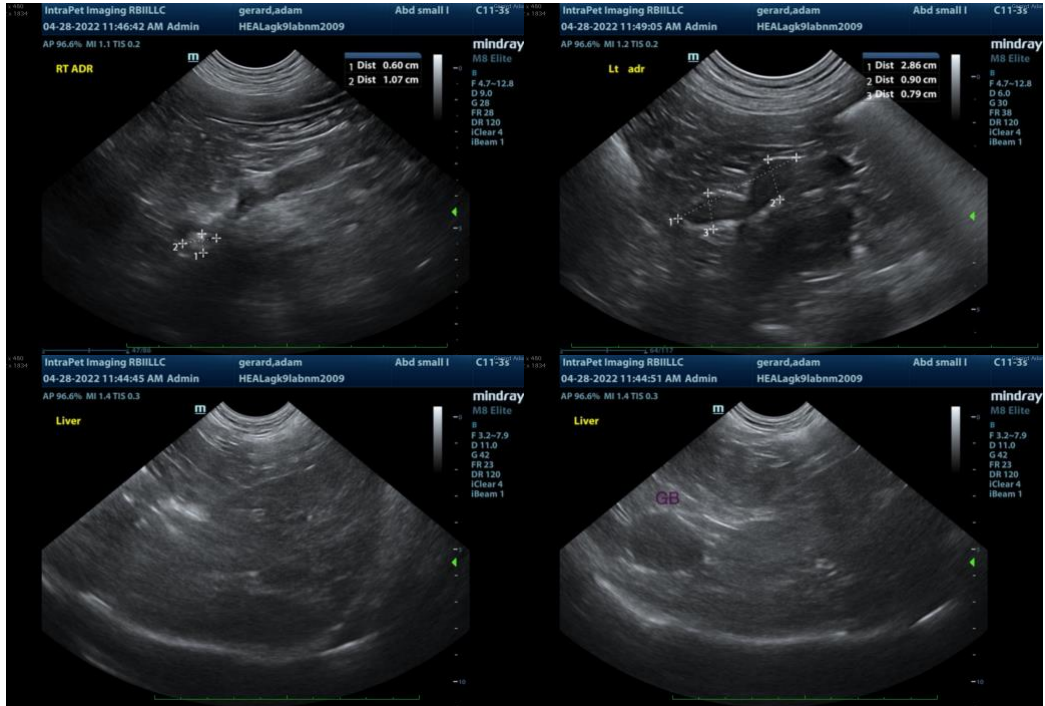
Secondary Findings

- Bilateral, chronic age-related renal changes. The right adrenal nodule trends toward the benign (i.e., nodular hyperplasia) with a lower possibility of an emerging tumor.
- The splenic parenchyma changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis or splenitis with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Regarding the pyloric antral wall changes, endoscopic or surgical biopsies may be warranted. Surgical biopsies are more likely to yield a definitive diagnosis. Thoracic radiographs are recommended prior to anesthesia to assess for evidence of metastatic disease.
- Regarding the liver enzyme elevations, a fine-needle aspirate can be considered to evaluate for round cell neoplasia. Cytology is typically of low yield for most other hepatopathies. Alternatively, consider serial monitoring (i.e., every 3-4 months) of the patient's liver values. If values continue to increase, a repeat abdomen ultrasound +/- hepatic tissue sampling may be warranted.
- Consider testing for hyperadrenocorticism with a low-dose dexamethasone suppression test or ACTH stimulation test if clinical signs (i.e., PU/PD) develop in the future.





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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