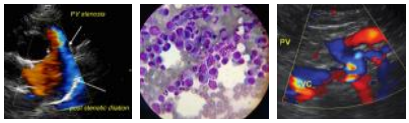
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
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DATE

4/13/2022

PATIENT

Luna Shriver

SPECIES

Canine

BREED

Belgian Shepherd

SEX

Spayed Female

AGE

3/13/2013

WEIGHT

91.2 lbs

INTERPRETED BY

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

HOSPITAL NAME

Route 140 Veterinary Hospital

REFERRING VET

Dr. Pierpont

INVOICE

10727

PRESENTING CLINICAL SIGNS

Presented 4/6/22 for heavier breathing, PD for 1 month. Eating WNLs. No C/S/V/D. Abdomen slight tense on examination.

Current Medications: Denamarin Large, Enrofloxacin 68mg 1 ½ BID for 14 days.
Lab Results: ALT/ALKP elevated. ALT 429, ALKP 1552.
Radiographs: Chest rads NSF. Abdomen- Hepatomegaly.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

Imaging Performed By: Andi Parkinson, 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 left kidney is normal size (7.94 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

The right kidney presented normal size (7.50 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

Adrenal Glands

The left adrenal gland is enlarged (1.03 cm at cranial pole) (1.06 cm at caudal pole) (4.02 cm in length); with a slightly irregular shape. The parenchyma is subtly heterogenous with some loss of glandular detail. A 0.90 x 0.65 cm hyperechoic nodule is observed at the cranial pole. The phrenicoabdominal vein and surrounding vasculature are normal

The right adrenal gland is enlarged (1.38 cm at cranial pole) (0.87 cm at caudal pole) (3.88 cm in length); with a slightly irregular shape. The parenchyma is subtly heterogenous with some loss of glandular detail. A 0.97 x 0.84 cm hyperechoic nodule is observed at the cranial pole. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is normal in size 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 enlarged with swollen peripheral contours. The parenchyma is hyperechoic relative to the spleen and subtly mottled/heterogenous in appearance, with a few small (<1 cm) ill-defined, hypo- and hyperechoic nodules. Hepatic vasculature and intrahepatic 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 choleliths 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 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 or overt infiltrative disease is noted.

Pancreas

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

- Bilateral adrenomegaly with bilateral nodules at the cranial poles. The nodules are most consistent with benign nodular hyperplasia. However emerging neoplasia in both glands cannot be completely excluded.
- The hepatic parenchymal changes are nonspecific and are most consistent with a benign hepatopathy (i.e., regenerative nodular hyperplasia and/or vacuolar hepatopathy). However, given the degree of ALT elevation, an inflammatory hepatopathy or neoplasia (less likely) are also possibilities.

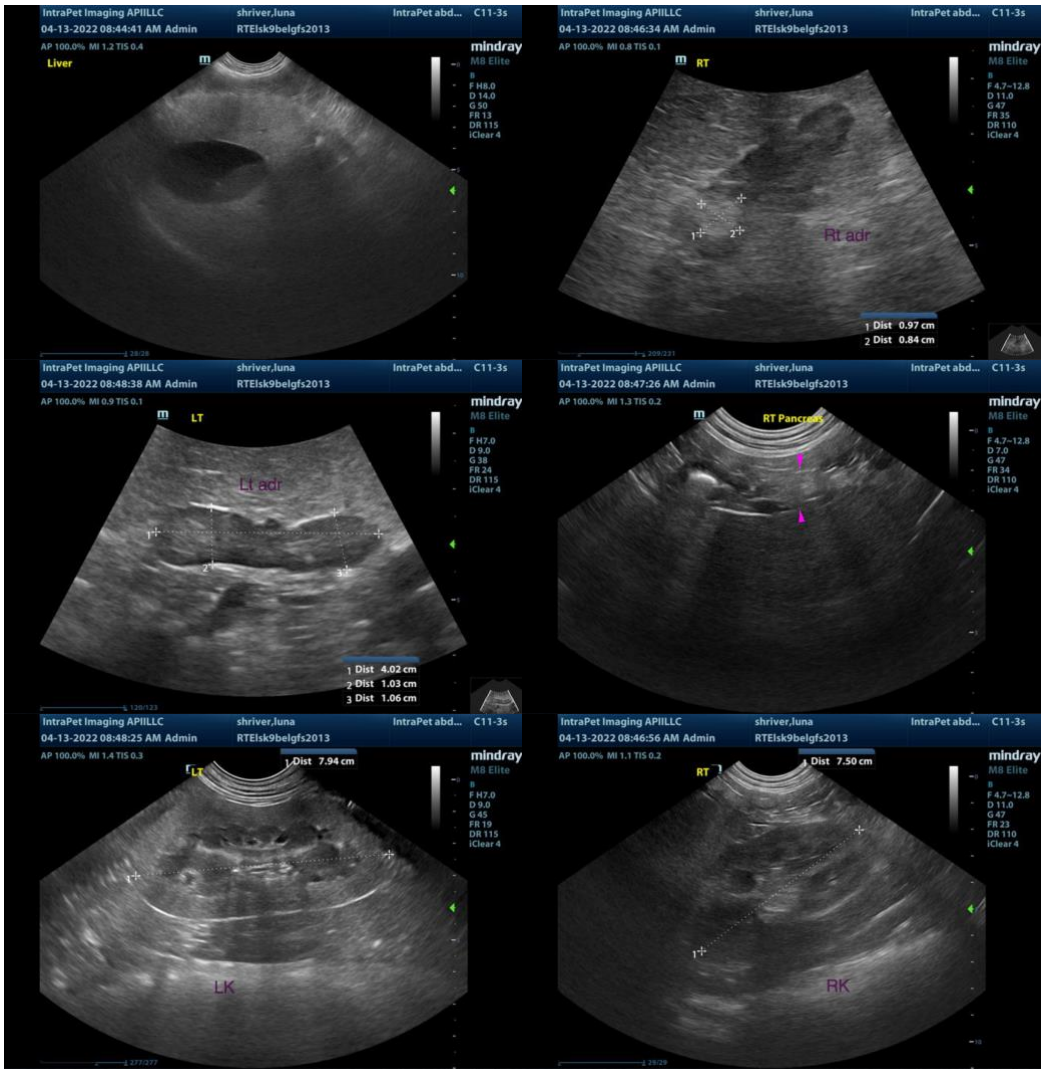
  **Given the liver values and sonographic changes, it is unclear whether the patient's issues are related to pituitary-dependent Cushing's Disease or primary hepatic disease. Cushing's Disease is favored given the appearance of the adrenal glands.

Secondary Findings

- Minor age-related pancreatic remodeling/fibrosis, with potential for low-grade inflammation, particularly if the patient exhibits cranial abdominal pain.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- A urinalysis +/- UPC (if proteinuria is present) are recommended, if not already performed.
- Pre-and postprandial serum bile acids to assess hepatic function
- Further testing for Cushing's disease (i.e., low-dose dexamethasone suppression test) or ACTH stimulation test
- Given the adrenal changes, a baseline blood pressure measurement is recommended to assess for hypertension.



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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