

**DATE PRESENTING CLINICAL SIGNS**

9.2.2022 Began having cluster seizures on 8/9/22. Bloodwork at that time showed an ALP of 1142U/L. P hospitalized and controlled on phenobarbital. Repeat bloodwork on 8/25/22 showed ALP of 1077U/L. 8/27/22- O called to report that P has temporal muscle atrophy bilaterally. Otherwise acting normally and seizure free. Non-painful when eating. No PU/PD prior to starting phenobarbital.

PATIENT

Charlie Moelter

Current Medications: Phenobarbital 97.2mg; 1 tab PO BID. Started 8/9/22.

SPECIES

Canine

Lab Results: 8/9/22 CBC: Mild neutrophilia 11.65K/uL Ddx: stress, inflammation, Mild basophilia 0.13K/uL Ddx: hypersensitivity, parasitic infection, other. Chemistry: Mild hypophosphatemia 2.2mg/dL Ddx: seizure, Mild hypochloridemia 108mmol/L Ddx: seizure, ALP 1412U/L Ddx: induction by drugs (prednisone), cushings disease, other, Mild hypercholesterolemia 415mg/dL Ddx: post-prandial. 8/25: ALP 1077U/L Phenobarbital Level: 22.2ug/mL (ideal)

BREED

Labrador Retriever

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Andi Parkinson, BS, RDMS.

SEX

Neutered Male

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**AGE**

8/1/2012

Urinary System

The **urinary bladder** wall is normal in thickness and the mucosal surface is smooth. The bladder is distended with anechoic urine. No masses, inflammatory changes or calculi are observed. The cystourethral junction and the visible portion of the proximal urethra are normal.

WEIGHT

81.3lbs

The region of the **prostate** is not visualized due to its pelvic location.**INTERPRETED BY**

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Diplomate DACVIM
(Small Animal
Internal Medicine)

The **left kidney** is normal size (7.05 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 hydroureter.

The **right kidney** is normal size (7.69 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 hydroureter.

HOSPITAL NAME

Timonium Animal
Hospital

Adrenal Glands

The **left adrenal gland** is normal size (0.55 cm at cranial pole) (0.54 cm at caudal pole) (2.57 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. Falkowski

The **right adrenal gland** is normal size (0.73 cm at cranial pole) (0.61 cm at caudal pole) (2.60 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

11581

Spleen

The **spleen** is normal in size (2.07 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 hyperechoic relative to the spleen and attenuating, with subtle mottling throughout the organ. Hepatic vasculature and intrahepatic 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 mild to moderate amount of aggregated, echogenic gravity dependent debris/sludge 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 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 right limb of the **pancreas** is visible with minimal deviation from the normal peripheral contours. The parenchyma is hyperechoic relative to surrounding omental fat and subtly mottled in appearance. No distinct focal lesions are observed. The pancreatic duct is visible but not overtly dilated (0.35 cm in diameter). There is no evidence of peripancreatic effusion.

Free Abdomen

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

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Suspected benign diffuse hepatopathy. Top differentials include vacuolar hepatopathy, +/- concurrent regenerative nodular hyperplasia. Inflammatory disease is considered less likely, given the lack of ALT elevation. Infiltrative neoplasia is possible, but also considered less likely, given the sonographic appearance.
- Gall bladder/sludge, non-mucocele

Secondary Findings

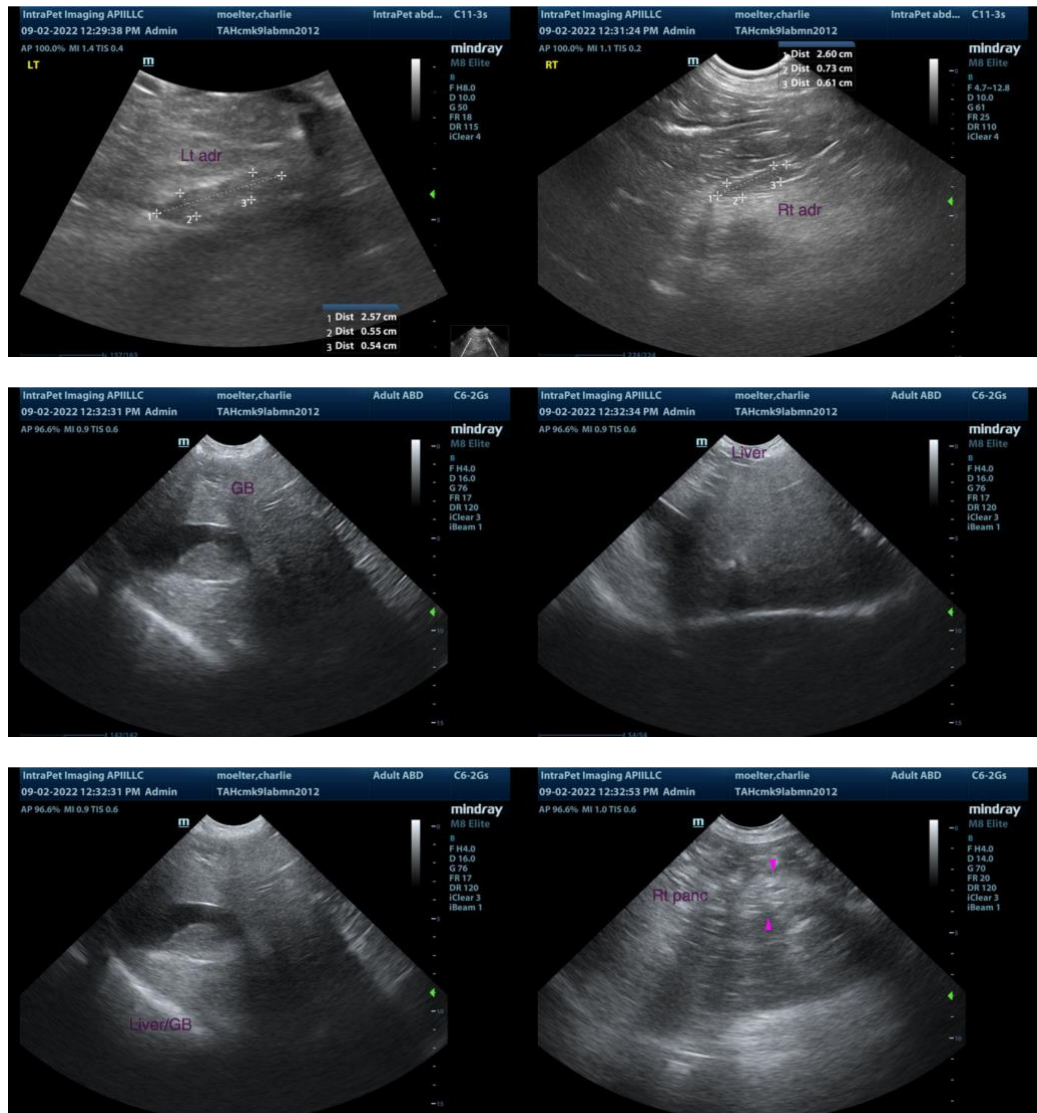
- Minor bilateral regenerative renal changes
- The splenic parenchymal changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis, splenitis or antigenic stimulation with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Pre-and postprandial serum bile acids +/- a blood ammonia level can be considered to assess for hepatic dysfunction.

Serial monitoring (i.e, every 3-4 months) of the patient's liver values is recommended. If values continue to increase, a repeat abdomen ultrasound +/- a more advanced hepatic work-up (i.e., tissue sampling) may be warranted.

Regarding the seizures, consultation with a board-certified neurologist is recommended.



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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