

**DATE**

11.1.2022

PATIENT

Zombie Micucci

SPECIES

Canine

BREED

Chihuahua

SEX

Neutered Male

AGE

11/19/2007

WEIGHT

4 kg

INTERPRETED BY

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

HOSPITAL NAME

Nexus Vet Spec

REFERRING VET

Dr. Steele

INVOICE

11937

PRESENTING CLINICAL SIGNS

Acute worsening of liver enzymes. Has chronic history of moderate ALP elevation (500 in Sept 2022, 300 in 2020), liver enzymes have otherwise been normal. 10/19 routine lab work revealed ALP >2000, ALT too high to read, elevated GGT, hyperglobulinemia. History of DMVD stage B2 (last echo June 2022), periodontal disease

Current Medications: Pimobendan 1.25mg BID

Lab Results: 10/19: ALT too high to read, ALP >2000, GGT 24, chol 325, glob 4.8. 9/16: ALT 97, ALP 500, normal GGT, chol 230

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.

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 moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. The region of the trigone is normal.

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

The **left kidney** is normal size (3.56 cm in length); with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild to moderate loss of corticomedullary distinction. A few, small cortical cysts are seen. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis.

The **right kidney** is normal size (3.90 cm in length); with a slightly irregular shape. There is a normal 1:3 cortex to medulla ratio with poor corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. A small cortical cyst is observed at the caudal pole. There is no evidence of pyelectasia, or hydroureter.

Adrenal Glands

The **left adrenal gland** is mildly enlarged (0.58 cm at cranial pole) (0.60 cm at caudal pole) (1.66 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 mildly enlarged (0.52 cm at cranial pole) (0.65 cm at caudal pole) (1.79 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.

Spleen

The **spleen** is normal in size (0.95 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. A small, ill-defined myelolipoma is observed near the hilus. Splenic vasculature is normal.

Liver

The **liver** is subjectively enlarged with swollen peripheral contours. The parenchyma is isoechoic relative to the spleen. A 2.44 x 1.26 cm hypoechoic area/nodule is observed on the left side, at the cranial aspect. In addition, a 0.39 cm anechoic cyst is observed deep on the right side, adjacent to the diaphragm. The remaining parenchyma is homogenous. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

The **gall bladder** is distended. The wall is normal to mildly thickened (up to 0.32 cm), hyperechoic and irregular. A large amount of suspended sludge in a stellate pattern, is observed within the lumen. The mesentery adjacent to the gall bladder wall is hyperechoic. 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 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

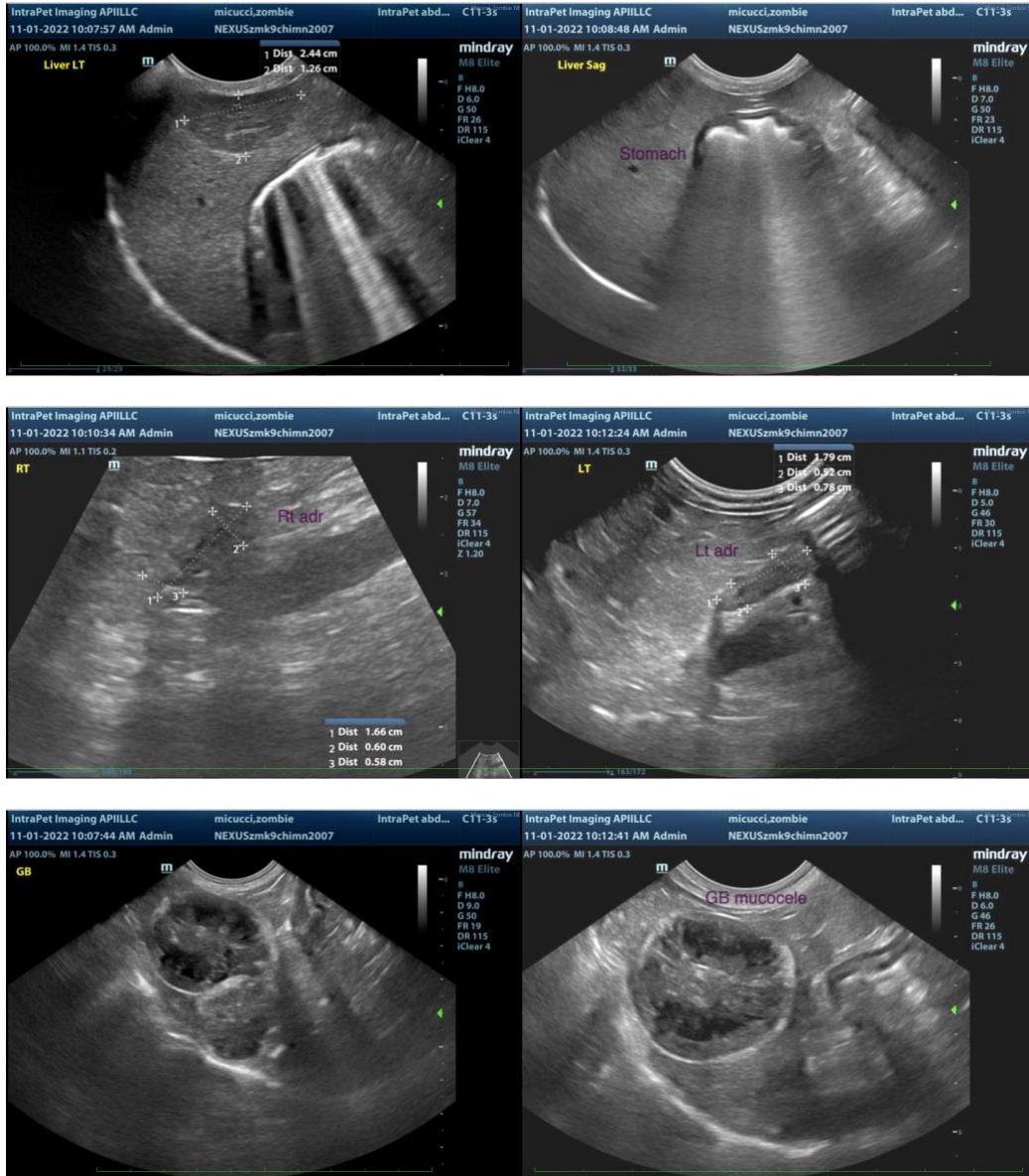
- The gall bladder changes are consistent with a fully-formed mucocele, with suspected cholecystitis and adjacent peritonitis.
- The hepatic parenchymal changes, in conjunction with the patient's clinical history, are suggestive of a diffuse hepatopathy. Differentials include inflammatory disease (bacterial cholangiohepatitis, chronic hepatopathy), Leptospirosis, other hepatopathy, with probable concurrent vacuolar hepatopathy and/or regenerative nodular hyperplasia. The hypoechoic hepatic nodule/area may represent a focus of inflammation, regenerative nodule, area or infarction, emerging tumor, other.

Secondary Findings

- Bilateral degenerative renal changes with dystrophic mineralization
- Mild bilateral adrenomegaly

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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