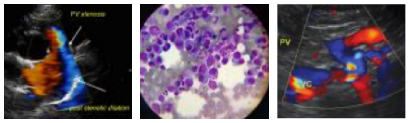
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
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DATE

12.29.22

PATIENT

Tug Marcinski

SPECIES

Canine

BREED

Terrier Mix

SEX

Neutered Male

AGE

3/24/2012

WEIGHT

54.8 lbs

INTERPRETED BY

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

HOSPITAL NAME

Everhart Veterinary Hospital

REFERRING VET

Dr. DelFavero

INVOICE

11979

PRESENTING CLINICAL SIGNS

P is non-clinical. Hx of elevated liver enzymes in July 2022 with increasing trend.

Current Medications: Milk thistle supplement long term.
Lab Results: July 2022 ALT 147, ALP 298. Dec 2022: ALT 241, ALP 637.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Stephanie Warga RDCS, RVT.

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. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The prostate is normal in size (1.19 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The left kidney is normal size (6.60 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (6.12 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal size (0.54 cm at cranial pole) (0.69 cm at caudal pole) (2.43 cm in length) with a normal shape and 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 size (0.54 cm at cranial pole) (0.54 cm at caudal pole) (2.80 cm in length) with a normal shape and 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 subjectively 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 normal in size. The parenchyma is hypoechoic relative to the spleen and subtly mottled in appearance. On the right side, a 3.34 cm isoechoic swelling/mass is visualized. The lesion causes slight capsular expansion. The remaining peripheral margins are curvilinear. 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 small amount of mostly gravity dependent, echogenic debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The gastric lumen is not distended. The gastric wall 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 mildly thickened (up to 0.80 cm) with a prominent muscularis layer and retention of the 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

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

- Right hepatic swelling/mass. Differentials include neoplasia (i.e., adenoma, adenocarcinoma, round cell tumor), inflammatory focus, benign regenerative nodule, other. The diffuse hepatic parenchymal changes are nonspecific and could be secondary to inflammatory disease (i.e., chronic hepatitis, bacterial cholangiohepatitis), hepatotoxicosis (i.e., copper), Leptospirosis (less likely), regenerative nodular hyperplasia, other hepatopathy.

- Gall bladder debris – non-mucocele

- The thickening of the pyloric antral wall could be secondary to hypertrophy, inflammation, emerging neoplasia, or may be a normal variant for this patient.

Secondary Findings

- Mild bilateral age-related renal changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Given the hepatic swelling/mass, thoracic radiographs (three-view) are recommended to assess for pulmonary metastatic disease. If the lungs are clear, consider an abdominal exploratory with an excisional biopsy of the hepatic swelling as well as sampling of the other liver lobes to assess for diffuse disease. If surgery is pursued, aerobic and anaerobic bile cultures are also recommended along with hepatic copper quantitation. Also consider biopsy of the pyloric antrum.

- If a more conservative approach is desired, consider empirical treatment for bacterial cholangiohepatitis (i.e., broad-spectrum antibiotics, hepatic antioxidants) with a recheck ultrasound in 4-6 weeks to assess for progression of the hepatic swelling/mass.

- Leptospirosis testing (i.e., blood and urine PCR, serology) can also be considered, particularly if clinical suspicion for disease is high.


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Spleen
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Cranial rt
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2 Dist 3.27 cm
Mass
Liver


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Cranial rt
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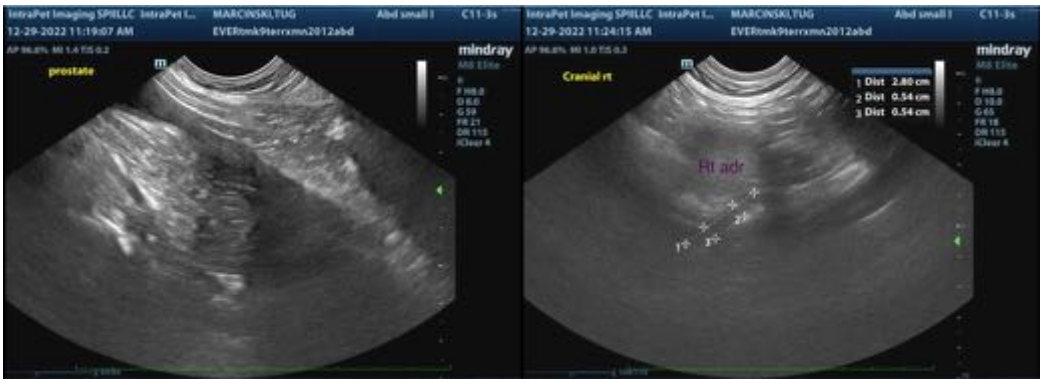
3 Dist 0.54 cm
Lt adr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prostate
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Cranial rt
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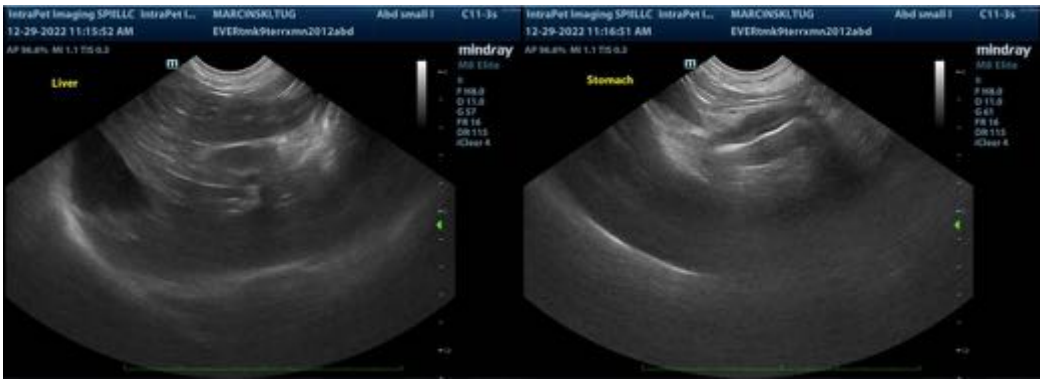
Rt adr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Liver
IntraPet Imaging SPILLC IntraPet I... MARCINSKI,TUG Abd small I C11-3s
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mindray
Stomach

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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