



**PATIENT**

Luke Donovan

**SPECIES**

Canine

**BREED**

Standard Poodle

**SEX**

Male, neutered

**AGE**

5 Yrs.

**WEIGHT**

57.8 lbs.

**INTERPRETED BY**

Andrea Nicastro, DVM,  
Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**IMAGING  
PERFORMED BY**

Sara Hansen

**HOSPITAL NAME**

West Hills AH

**REFERRING VET**

Dr. Glaze

**DATE**

5/24/22

**INVOICE**

13423

**PRESENTING CLINICAL SIGNS**

History: ADR. Decreased appetite. Slightly tense on abdominal palpation. MM slightly tacky.  
Abnormal PE/Chem/CBC/UA Results: Chem 22/lytes CBC was WNL except for ALT 844 and cPL  
snap abnormal. Temp 104.2. FUO panel and spec cPL are pending Current Medications IV LRS

**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 (1.21 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 (7.66 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. Renal vasculature is normal.

The right kidney is normal size (6.20 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. Renal vasculature is normal.

*Adrenal Glands*

The left adrenal gland is normal size (0.47 cm at cranial pole) (0.56 cm at caudal pole) (2.21 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.

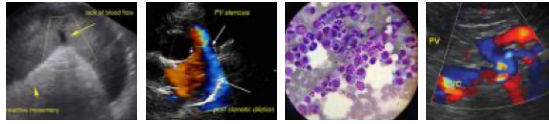
The right adrenal gland is normal size (0.77 cm at cranial pole) (0.65 cm at caudal pole) (3.11 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

*Spleen*

The spleen is normal in size (2.01 cm in width at the level of the hilus) 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 slightly swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely homogeneous 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 mildly to moderately distended. The wall is slightly thickened (0.32 cm). Luminal contents are mostly anechoic. The cystic and common bile ducts are normal/not seen.



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***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. No obstructive 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***

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. A 1.91 cm medial iliac lymph node is visualized. The node is normal in shape and echogenicity. A few prominent jejunal lymph nodes are also seen, the largest measuring 2.46 cm length.

***Other***

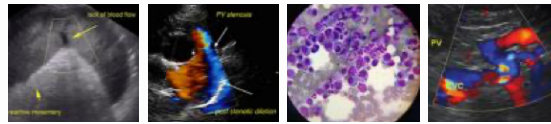
A brief echocardiogram reveals no evidence of pericardial effusion or obvious right atrial/auricular mass.

**ULTRASONOGRAPHIC FINDINGS**

- Suspected benign diffuse hepatopathy. Top differentials include inflammatory disease (i.e., bacterial cholangiohepatitis, chronic active hepatitis), Leptospirosis, copper hepatotoxicosis, infiltrative neoplasia (less likely), other hepatopathy.
- The gallbladder wall changes are most consistent with cholecystitis.
- The lymph node changes are most consistent with reactive lymphadenitis or lymphoid hyperplasia.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

- Leptospirosis testing (i.e., blood and urine PCR, serology).
- Consider pre- and post-prandial serum bile acids to assess hepatic function.
- Hepatic tissue sampling (i.e., fine needle aspirate or surgical biopsy) is recommended to get a definitive diagnosis. Clotting times should be assessed prior to any tissue sampling. Surgical biopsies would be ideal in that they are more likely to be representative of global organ pathology. If pursued, aerobic and anaerobic bile cultures and acquisition of additional hepatic tissue samples for potential copper quantitation are recommended.
- If a conservative approach is desired, consider empirical treatment for bacterial



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cholangiohepatitis (amoxicillin-clavulanic acid, Denamarin +/- metronidazole). If no improvement in the liver values is seen within 7-10 days of initiating therapy, antibiotics should be discontinued and hepatic tissue sampling reconsidered. If liver values improve, continue therapy for at least 4-6 weeks and 1 week beyond normalization of the liver values.

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- If the patient does not respond to antibiotic therapy, further workup for fever of unknown origin (i.e., echocardiogram, thoracic radiographs, urine culture and sensitivity, orthopedic/neurologic evaluations) may be warranted.

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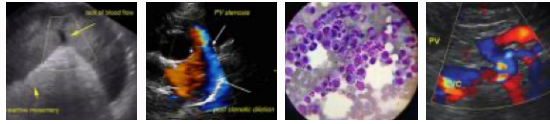
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The information and recommendations provided are based on the images presented by the referring



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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.

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

[andrea.nicastro@sonopath.com](mailto:andrea.nicastro@sonopath.com)