

**PATIENT PRESENTING CLINICAL SIGNS**

Hunter Caporelli Presented for routine castration. Pre-anesthetic lab work showed elevation of liver enzymes. No clinical signs. Normal CBC. Pre-prandial bile acid WNL. ALT 832; ALP 472.

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Canine **Urinary System**

**BREED**

Leonberger

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

**SEX**

Intact Male

The prostate was enlarged in size with intact, symmetrical capsule contour. The margins of the gland were intact and able to be differentiated from the surrounding tissue. The prostatic parenchyma was mildly echogenic to heteroechoic without parenchymal mineralization. A solitary parenchymal cyst was noted in the cranial prostatic lumen. The prostate itself measured 4.0 cm in diameter.

**AGE**

6 Years

Normal size and margination was present in the kidneys. A normal 1:3 cortex / medulla ratio and normal corticomedullary definition were maintained. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pelvic dilation. No evidence of corticomedullary mineralization. The left kidney measured 8.4 cm. The right kidney measured 9.2 cm.

**WEIGHT**

150 Pounds

The area of the aortic trifurcation was free of pathology.

**Adrenal Glands**

**INTERPRETED BY**

R. McKenzie Daniel, DVM,  
DABVP (Canine and Feline)

The adrenal glands were uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.63 cm at the cranial pole and 0.66 cm at the caudal pole. The right adrenal gland measured 0.67 cm at the cranial pole and 0.71 cm at the caudal pole.

**Spleen**

**IMAGING PERFORMED BY**

Pamela Harrigan, RDMS

The spleen was normal in size and contour with normal splenic parenchymal echogenicity and moderate coarse echotexture. No evidence of splenic neoplasia.

**Liver**

**HOSPITAL NAME**

Wood River AH

The liver was normal in size and contour with overall hepatic parenchyma echogenicity with moderate coarse echotexture and subtle increased yet indistinct prominence of the portal vascular borders. Subjectively normal hepatoportal vascular volume. No hepatic masses or nodules. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal.

**REFERRING VET**

Dr. Leah Fischer

**Gastrointestinal**

**INVOICE**

26762

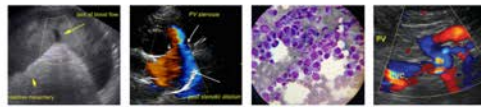
The stomach presented intact wall layering with a normal wall layer ratio. Minor retained echogenic non-shadowing gastric ingesta/chyme.

**DATE**

10/29/21

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material.

Normal visible colon wall layers were present with apparent formed feces in lumen.



**PATIENT**

**Pancreas**

Hunter Caporelli

The parenchyma of the left limb, body and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease was evident.

**SPECIES**

Canine

**Free Abdomen**

**BREED**

Leonberger

Focal, mildly prominent to enlarged medial iliac lymph node was present, measuring 1.7 cm x 0.66 cm. This lymph node was not consistent with inflammatory or neoplasia criteria and is likely incidental. The lymph node was essentially isoechoic to adjacent omentum without evidence of peripheral inflammation and maintaining a normal width: length ratio (<0.5).

**SEX**

Intact Male

- Hepatopathy
- Benign prostatic hyperplasia with solitary parenchymal cyst, minor potential for prostatitis, yet unlikely
- Subtle splenic parenchyma heterogeneity – subjectively benign

**AGE**

6 Years

**SECONDARY FINDINGS**

- Minor retained gastric ingesta – probable post-prandial presentation

**WEIGHT**

150 Pounds

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**INTERPRETED BY**

R. McKenzie Daniel, DVM,  
 DABVP (Canine and Feline)

The overall liver was non-specific, yet consistent with benign, likely chronic hepatopathy. Non-specific hepatitis (infectious, immune mediated), hepatotoxicosis (i.e., copper hepatopathy given the ALT elevation) with potential for concurrent vacuolar hepatic changes and non-clinical cholestasis given the ALP elevation. No overt evidence of a portosystemic shunt given the subjective normal hepatoportal vascular volume as well as lack of renal and urinary bladder mineral.

**IMAGING PERFORMED BY**

Pamela Harrigan, RDCS

Further assessment may include hepatic sampling, preferably core or surgical biopsy +/- Leptospirosis titers/PCR if clinically indicated. Hepatosupportive medications including Denamarin and Ursodiol may prove beneficial. No overt anesthetic contraindications given the normal pre-prandial bile acids and assuming normal albumin, glucose, cholesterol, and BUN levels.

**HOSPITAL NAME**

Wood River AH

**REFERRING VET**

Dr. Leah Fischer

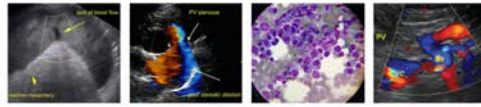


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**PATIENT**

Hunter Caporelli

**SPECIES**

Canine

**BREED**

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**SEX**

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**WEIGHT**

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**HOSPITAL NAME**

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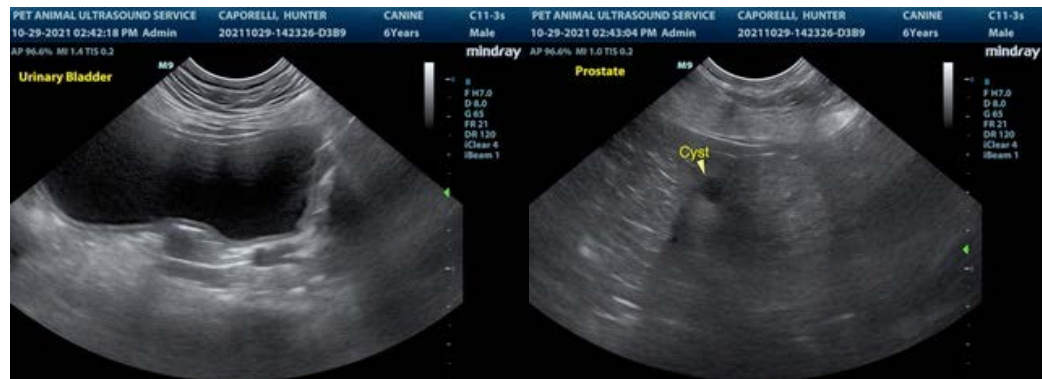
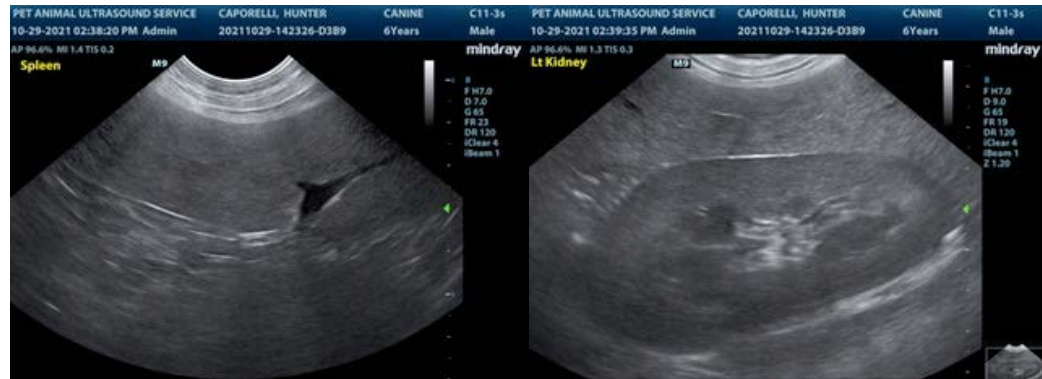
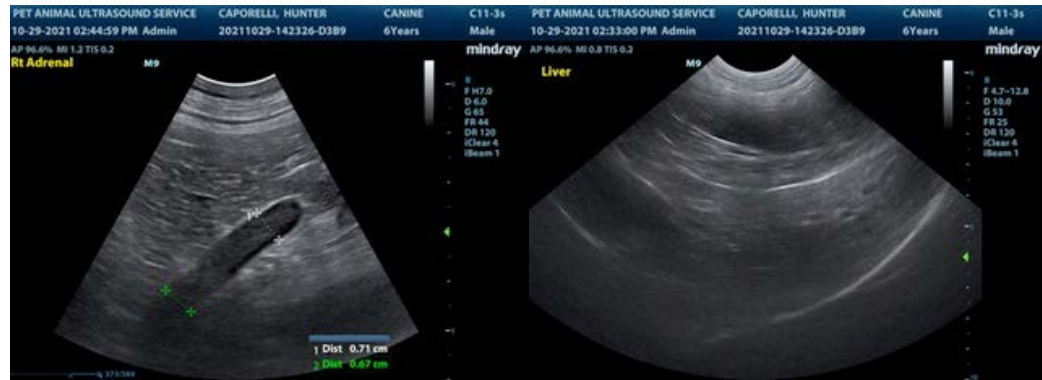
Dr. Leah Fischer

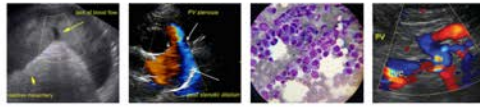
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**PATIENT**

Hunter Caporelli

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

**SPECIES**

Canine

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.

**BREED**

Leonberger

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info@SonoPath.com

**SEX**

Intact Male

**AGE**

6 Years

**WEIGHT**

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