



**PATIENT PRESENTING CLINICAL SIGNS**

Princess Nenstiel  
History: Elevated ALT  
Medication: Denamarin

**SPECIES**  
Canine  
Labs: ALT 482

**BREED Urinary System**

Lhasa Mix  
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. Aortic trifurcation was normal.

**SEX**  
FS  
Normal size and margination were 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. The left kidney measured 4.5 cm in length. The right kidney measured 4.4 cm in length.

**AGE**  
6 years

**Adrenal Glands**

**WEIGHT**  
18 Pounds  
The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.58 cm width at the caudal pole and 0.43 cm width at the cranial pole.

**INTERPRETED BY**

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

The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.70 cm width at the caudal pole and 0.73 cm width at the cranial pole.

**Spleen**

**IMAGING PERFORMED BY**

Rebekah Jakum, CVT  
ARDMS/RVT

The spleen was normal in size and contour with primarily maintained generalized finely textured homogeneous parenchyma. Focal to intermittent, non-expansive hypoechoic to anechoic parenchymal nodules were present. An example of a splenic nodule measured 0.6 cm in diameter.

**HOSPITAL NAME**

White Haven VH

**Liver**

**REFERRING VET**

Dr. Dengler

The liver exhibited subjective mild enlargement. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion.

**INVOICE**

13607

The gallbladder was non distended in size with mild nondependent yet nonorganized gallbladder debris. The gallbladder walls were sonographically normal without evidence of inflammation. The cystic duct and common bile ducts were normal without evidence of dilation.

**DATE**

1.24.2022

**Gastrointestinal**

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained mild retained non-shadowing ingesta/chyme without signs of obstruction or foreign material. The gastric body wall measured 0.32 cm.



**PATIENT**

Princess Nenstiel

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. The duodenum wall measured 0.40 cm.

**SPECIES**

Canine

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

**Pancreas**

**BREED**

Lhasa Mix

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.

**Free Abdomen**

**SEX**

FS

No overt lymphadenopathy or peritoneal effusion was present.

**ULTRASONOGRAPHIC FINDINGS**

**AGE**

6 years

- Nonspecific focal to intermittent non-expansive splenic nodules
- Hepatopathy- subjectively benign
- Mild gallbladder debris (non-mucocele)
- Mild retained gastric ingesta/chyme

**WEIGHT**

18 Pounds

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The liver was nonspecific yet consistent with benign hepatopathy. Although not definitive, primary considerations for nonspecific inflammatory hepatopathy or hepatobiliary process such as hepatitis/cholangiohepatitis (immune mediated, infectious or other), given the ALT and presence of mild gallbladder debris. The gallbladder debris may also suggest some degree of nonclinical cholestasis. No overt evidence of neoplastic criteria. Further assessment may include, assuming normal clotting status, hepatic FNA for screening cytology and potential identification of inflammatory cell type, if present. Leptospirosis titers/PCR could be considered, if clinical indicated yet considered unlikely given the lack of clinical signs.

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(Canine and Feline)

No overt evidence of adrenal pathology. Hepatosupportive medications, including Denamarin, Ursodiol recommended. Hepatic surgical or core biopsy may be required for a definitive diagnosis.

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The presence of mild retained gastric ingesta/chyme was nonspecific. If documented NPO, some degree of gastric stasis may be possible yet not definitive. No evidence of gastrointestinal structural pathology or active pancreatitis as potential contributing factors to the ALT elevation.

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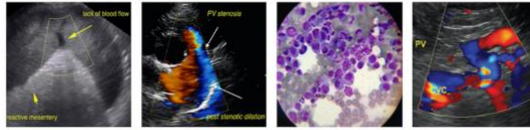
1.24.2022



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.

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.

**R. McKenzie Daniel, DVM, DABVP (Canine/Feline Practice)**  
[mac.daniel@sonopath.com](mailto:mac.daniel@sonopath.com)



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