

PATIENT PRESENTING CLINICAL SIGNS

Mack Glew Presented for possible ingestion of xylitol. Elevated ALT (787) and ALP (430), normoglycemic over 72 hours. No change on IVF. Elevated bile acids, both pre (15.7) and post (65).

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Canine **Urinary System**

BREED The urinary bladder 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.

Havanese The residual prostate was normal at 0.60 cm in width.

SEX Normal size and margination was present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. Pinpoint medullary mineral was present. A small cranial cortical cyst was present in the right kidney. The left kidney measured 4.4 cm. The right kidney measured 4.5 cm.

Neutered Male

AGE **Adrenal Glands**

12 Years

The adrenal glands were uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.41 cm in at the cranial pole and 0.41 cm at the caudal pole. The right adrenal gland measured 0.49 cm at the cranial pole and 0.48 cm at the caudal pole. No evidence of hyperplasia or adrenal tumors.

WEIGHT **Spleen**

17.3 Pounds

INTERPRETED BY

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

The spleen exhibited primarily finely textured parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Mild generalized parenchyma heterogeneity was present without evidence of nodular changes. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. The parenchymal heterogeneity is likely consistent with benign changes such as extramedullary hematopoiesis or age related remodeling with minor potential for inflammatory or neoplastic disease.

IMAGING PERFORMED BY **Liver**

Pamela Harrigan, RDMS

HOSPITAL NAME

Wood River AH

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was mildly nonuniform and hyperechoic to the spleen with a moderate coarse echotexture and subjective mild to benign parenchymal remodeling. The hepatic and portal vasculature were normal in appearance without signs of congestion. Moderate non-dependent to mildly inspissated echogenic gallbladder debris was present. The gallbladder was otherwise normal and non-distended. The common bile duct was normal.

REFERRING VET

Dr. Leah Fischer

Gastrointestinal

INVOICE

24513

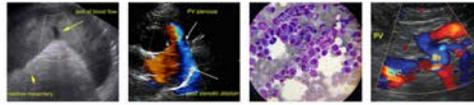
The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material.

DATE

8/10/21

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*

Mack Glew The pancreas was normal in size and contour with subtle hypoechoic to non-homogeneous parenchyma compared to adjacent omentum.

SPECIES *Free Abdomen*

Canine No overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

BREED

Havanese

- Echogenic to non-uniform liver
- Moderate non-dependent to mildly inspissated gallbladder debris
- Mild to moderate chronic renal changes with pinpoint medullary mineral and right kidney cortical cyst
- Mildly hypoechoic pancreas

SEX

Neutered Male

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

AGE

12 Years

Sonographically the overall liver was suggestive of chronic hepatopathy as opposed to acute hepatopathy or hepatic insult. Chronic active hepatitis, cholangiohepatitis, vacuolar hepatopathy, early fibrosis/cirrhosis, or other hepatopathy with parenchymal remodeling possible. Hepatic neoplasia is considered an unlikely differential diagnosis. The possibility of concurrent hepatotoxic insult cannot be definitively excluded. No evidence of gallbladder or common bile duct inflammation, yet potential for early to emerging gallbladder mucocele possible.

WEIGHT

17.3 Pounds

Empirically, hepatosupportive medications (ie., Denamarin and Ursodiol) recommended with continued monitoring of hepatic enzymes or for evidence of increasing cholestasis. Hepatic core biopsy is likely required for definitive diagnosis.

INTERPRETED BY

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

The mildly hypoechoic pancreas is non-specific and may indicate patient variant with potential for low-grade inflammation if evidence of cranial abdominal or subxiphoid discomfort on palpation. No evidence of a portosystemic vascular anomaly.

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

Wood River AH

REFERRING VET

Dr. Leah Fischer

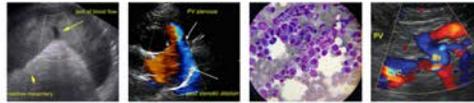


INVOICE

24513

DATE

8/10/21



PATIENT

Mack Glew

SPECIES

Canine

BREED

Havanese

SEX

Neutered Male

AGE

12 Years

WEIGHT

17.3 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

Wood River AH

REFERRING VET

Dr. Leah Fischer

INVOICE

24513

DATE

8/10/21



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)
 info@SonoPath.com