

PATIENT PRESENTING CLINICAL SIGNS

Toby Clelan History: Elevated liver values
ALP 539, ALT 264

SPECIES

Canine

BREED

Scottish Terrier

SEX

Neutered Male

AGE

6 years

WEIGHT

27 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Rebekah Jakum, CVT
ARDMS/RVT

HOSPITAL NAME

Carlisle Small Animal
VC

REFERRING VET

Dr. Morris

INVOICE

13079

DATE

1.4.2022

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

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 was noted.

The residual prostate was symmetrically normal in size with uniform parenchyma and slight coarse echotexture measuring 0.77 cm in diameter.

The area of the aortic trifurcation was free of pathology.

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 4.7 cm in length. The right kidney measured 5.5 cm in length.

Adrenal Glands

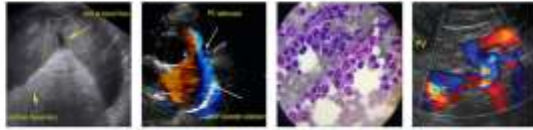
The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.58 cm width at the caudal pole and 0.42 cm width at the cranial pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.41 cm width at the caudal pole and 0.39 cm width at the cranial pole. No evidence of hyperplasia or neoplastic criteria was noted.

Spleen

The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. 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. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

Liver/ Gallbladder

The liver exhibited subjective mild generalized 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. The gallbladder was non-distended in size with mild gallbladder debris. The gallbladder was otherwise normal. The cystic and common bile ducts were normal.



PATIENT

Gastrointestinal

Toby Clelan

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.

SPECIES

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.

Canine

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

BREED

Pancreas

Scottish Terrier

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 were evident.

SEX

Free Abdomen

Neutered Male

No overt lymphadenopathy or peritoneal effusion was present.

AGE

ULTRASONOGRAPHIC FINDINGS

6 years

Primary Findings

WEIGHT

- Hepatopathy - subjectively benign
- Mild gallbladder debris (non-mucocele)

27 Pounds

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R. McKenzie Daniel,
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(Canine and Feline)

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The overall liver was nonspecific yet consistent with benign hepatopathy. Considerations may include idiopathic or breed-associated vacuolar hepatopathy, inflammatory / immune-mediated disease, and mild nonclinical cholestasis, given the presence of mild gallbladder debris. No overt evidence of neoplastic criteria was noted, which is considered an unlikely differential diagnosis.

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Assuming normal clotting status, ultrasound-guided FNA of the liver could be considered for screening cytology primarily to assess for evidence of inflammatory cells. Hepatosupportive medications including Denamarin and Ursodiol are recommended.

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Given the potential for breed-associated hepatopathy, serial sonographic monitoring of the liver for evidence of progressive parenchymal changes or development of nodules to masses is recommended ideally every 6 months if possible or sooner if progressive hepatic enzyme elevations or signs of cholestasis are noted.

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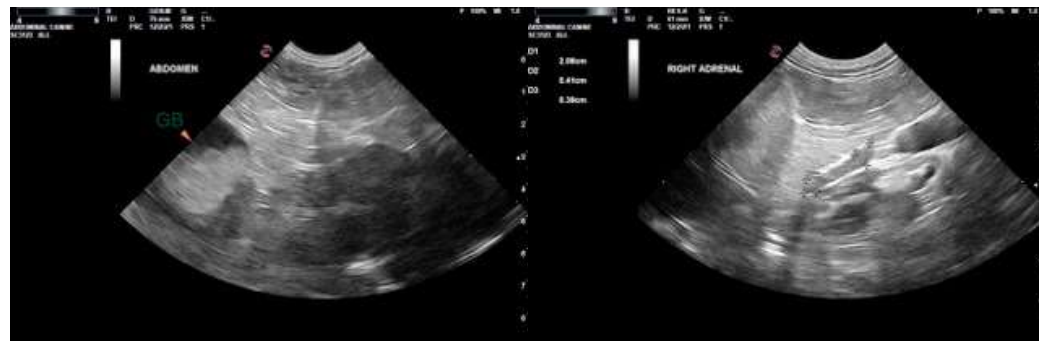
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.



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