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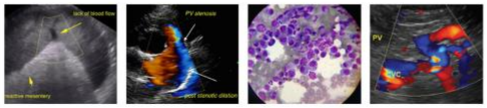

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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PATIENT

Little Boy Henry Heatley

SPECIES

Canine

BREED

Pug

SEX

Neutered Male

AGE

2 Years

WEIGHT

31 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

Barnstable AH

REFERRING VET

Elisabeth McCartney, DVM

INVOICE

16081

DATE

6/13/22

PRESENTING CLINICAL SIGNS

History: Pre-operative labs for entropion surgery showed elevated ALT (653); and AST (233). ALP, GGT and bilirubin WNL. Repeat labs 1 month later, showed continued elevations. Patient is obese. CK 214. No clinical signs; doing well at home; good appetite.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder was normal in size and tone Moderate primarily dependent to mildly nondependent hyperechoic urinary bladder sediment to mineral. No evidence of macrocalculi. No evidence of inflammatory urinary bladder mural changes. The mineral appeared to extend into the area of the urinary bladder neck and proximal to prostatic urethra without evidence of obstruction of urine outflow.

The residual prostate was symmetrically normal in size with uniform parenchyma and slight coarse echotexture measuring 0.74 cm in diameter.

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 5.0 cm in length. The right kidney measured 5.6 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 0.41 cm width at the caudal pole and 0.31 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 0.42 cm width at the caudal pole and 0.53 cm width at the cranial pole.

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.

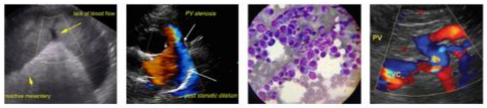
Liver

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion. The hepatic vein appeared to exhibit normal subjective branching.

The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal.

Gastrointestinal

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.



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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.

Pancreas

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

No overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

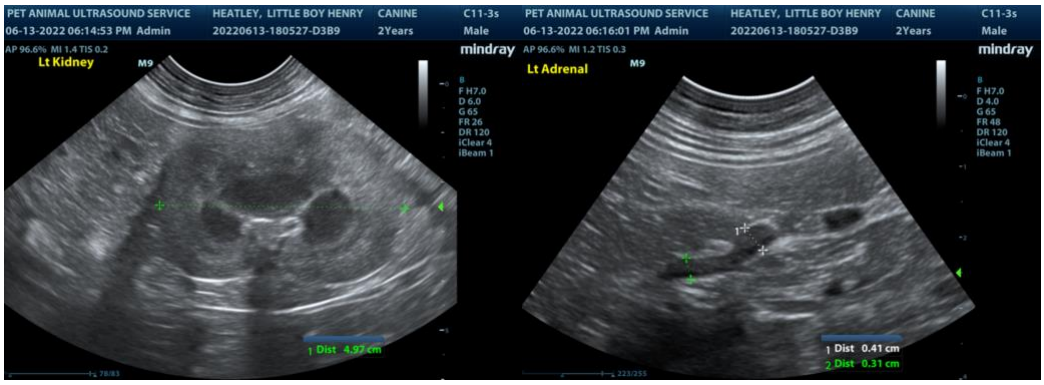
- Moderate urinary bladder sediment/mineral
- Overtly normal liver with subjective normal hepatic volume

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The overall liver was nonspecific yet consistent with benign hepatopathy. Nonspecific inflammatory hepatopathy is suspected given the ALT/AST elevation. Potential for additional etiologies, such as portal hypoplasia/microvascular dysplasia possible. Overt evidence of a portosystemic shunt was not definitively evident and considered a less likely differential diagnosis given the presence of concurrent urinary bladder sediment/mineral. Likewise, portosystemic shunt is considered a less likely differential diagnosis given the lack of reported clinical signs.

Further assessment may include fasting and post prandial bile acids. Hepatic functionality is, however, likely normal if normal albumin, BUN, glucose and cholesterol levels. Assuming normal clotting status, hepatic FNA could be considered for screening cytology and potential identification of inflammatory cell type. Core or surgical biopsy may be required for a definitive diagnosis. Assessment of hepatic functionality is recommended prior to anesthetic considerations. Hepatosupportive medications may prove beneficial.

Full urinary work up, including urinalysis, as well as culture and sensitivity recommended, if not done.



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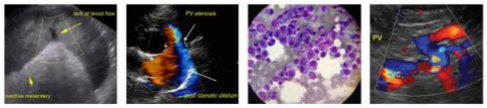

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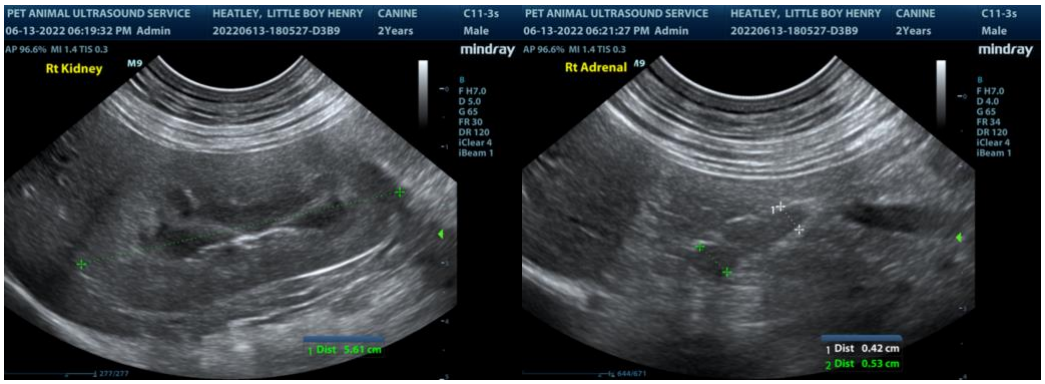

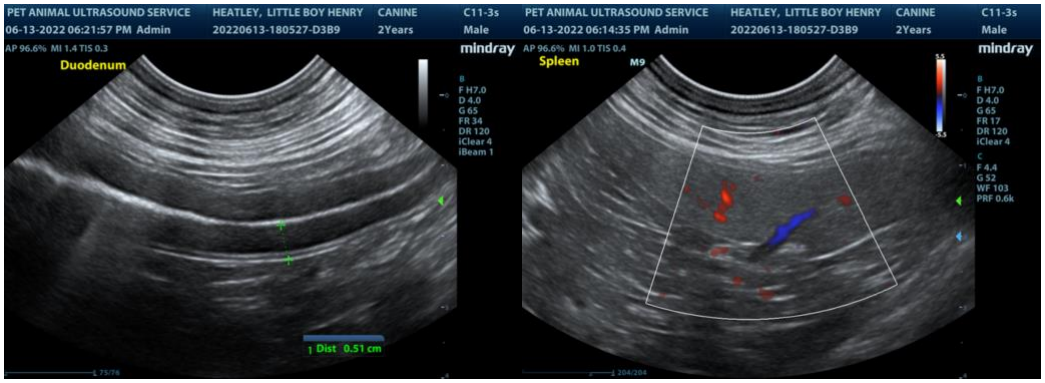

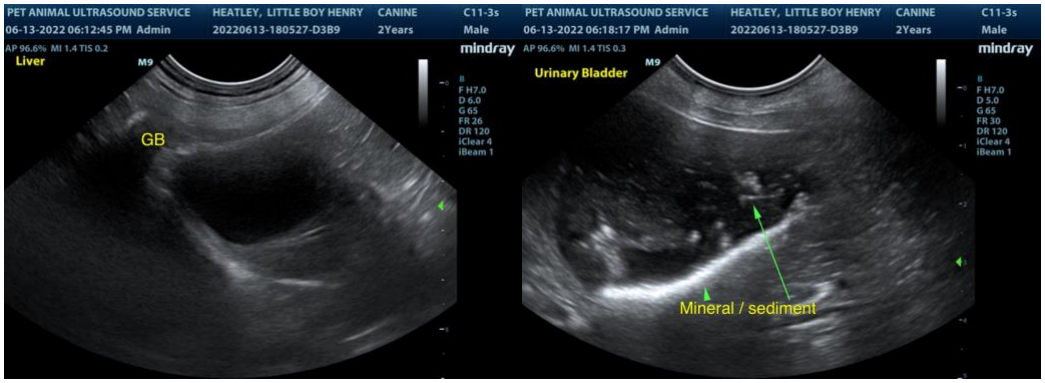

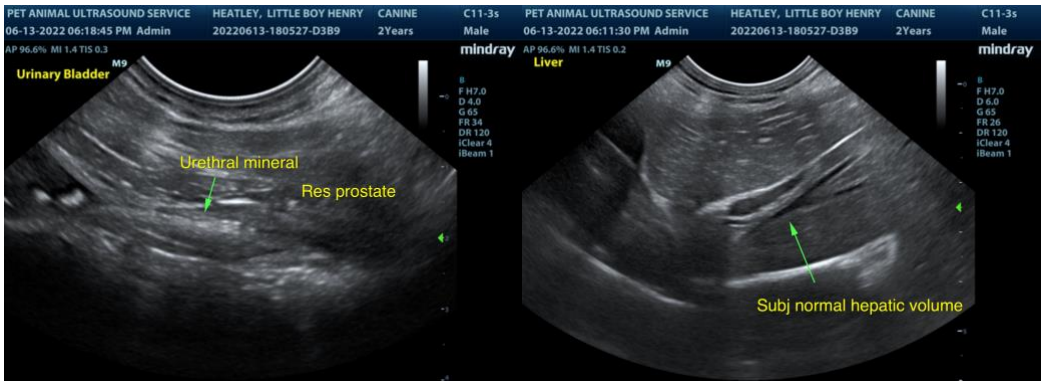

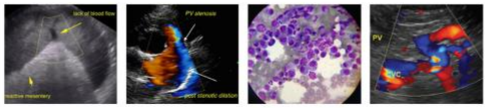

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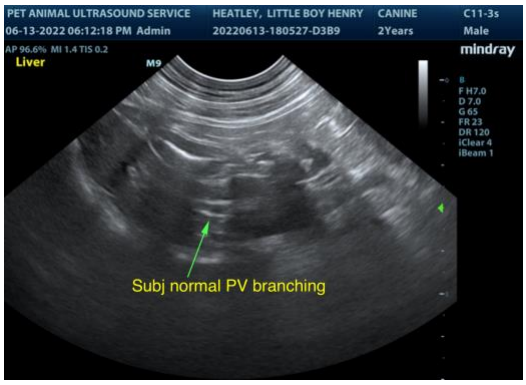

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)
info@SonoPath.com