

PATIENT PRESENTING CLINICAL SIGNS

Wolfgang Houck History: Hacks up fluid first thing in the morning, one time was bile. Eating and drinking normally and normal activity level. Diet is Eukanuba lamb and rice. Had been on Denamarin for elevated liver values. (ALT 286; ALP 204, all else WNL)

SPECIES

Canine

BREED

Keeshond

SEX

Neutered Male

AGE

10 Years

WEIGHT

40.8 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

Pamela Harrigan, RDCS

REFERRING VET

Jaime Driscoll, DVM

INVOICE

14588

DATE

4/4/22

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 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.

The residual prostate was symmetrically normal in size with uniform parenchyma and slight coarse echotexture measuring 0.85 cm in diameter.

Normal size and margination were 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. The left kidney measured 6.5 cm in length. A solitary, thinly walled medullary cyst was present in the right kidney, measuring 0.39 cm in diameter, containing anechoic fluid. The right kidney measured 6.2 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 0.56 cm width at the caudal pole and 0.47 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 0.52 cm width at the caudal pole and 0.89 cm width at the cranial pole.

Spleen

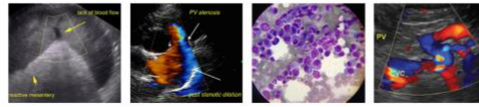
The spleen was normal in size and overall contour. Areas of minor medial capsule hyperechoic asymmetry were present. A solitary, non-expansive, echogenic nodule, medial parenchyma, adjacent to the hilus, was present in the spleen. The splenic nodule measured 1.0 cm in diameter.

Liver

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was mildly nonuniform and hypoechoic 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.

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

Gastrointestinal



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The stomach presented intact wall layering with a normal wall layer ratio. Mild subjective gas distention was present. The ventral gastric body wall measured 0.20 cm.

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The duodenum exhibited segmental prominent wall layering, exhibiting nonspecific increased mucosa echogenicity. Possible focal area of mucosal cratering, exhibiting hyperechoic echogenicity with subtle distal acoustic shadowing, suggestive of possible focal duodenal ulcer present, measuring approximately 0.5 cm in diameter. The duodenum wall measured 0.50 cm in diameter. The jejunum to the level of the ileum and ileocolic junction were overtly normal. The jejunum wall measured 0.40 cm.

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

SEX

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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.

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Free Abdomen

Intermittent, mildly prominent to enlarged mesenteric lymph nodes were present. The lymph nodes were essentially isoechoic to adjacent omentum without evidence of peripheral inflammation and maintaining a normal width: length ratio (<0.5). An example of a mesenteric lymph node measured 0.36 cm in width.

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A focal, mildly prominent to enlarged medial iliac lymph node was present. The lymph node was essentially isoechoic to adjacent omentum without evidence of peripheral inflammation and maintaining a normal width: length ratio (<0.5). An example of medial iliac lymph node size measured 0.40 cm width.

No free fluid noted.

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ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Sonographically unremarkable yet mild gas distended stomach
- Subjective duodenitis with possible focal duodenal ulcer
- Chronic hepatopathy, exhibiting generalized parenchymal remodeling- subjectively benign
- Mild to moderate gallbladder debris (non-mucocele)
- Mild chronic renal changes with right kidney cyst

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

Secondary Findings

- Benign splenic nodules and probable medial capsule fibrosis- benign, consistent with benign myelolipoma

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The overall liver was nonspecific yet consistent with benign chronic hepatopathy with potential considerations, including vacuolar hepatopathy, chronic active hepatitis, cholangiohepatitis, early fibrosis, cirrhosis or other hepatopathy. Ultrasound guided FNA of the liver could be considered for screening cytology, primarily to assess for inflammatory cells. Continued hepatosupportive medications would be reasonable given the relatively low-grade hepatic enzyme elevations.

REFERRING VET

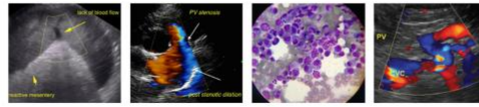
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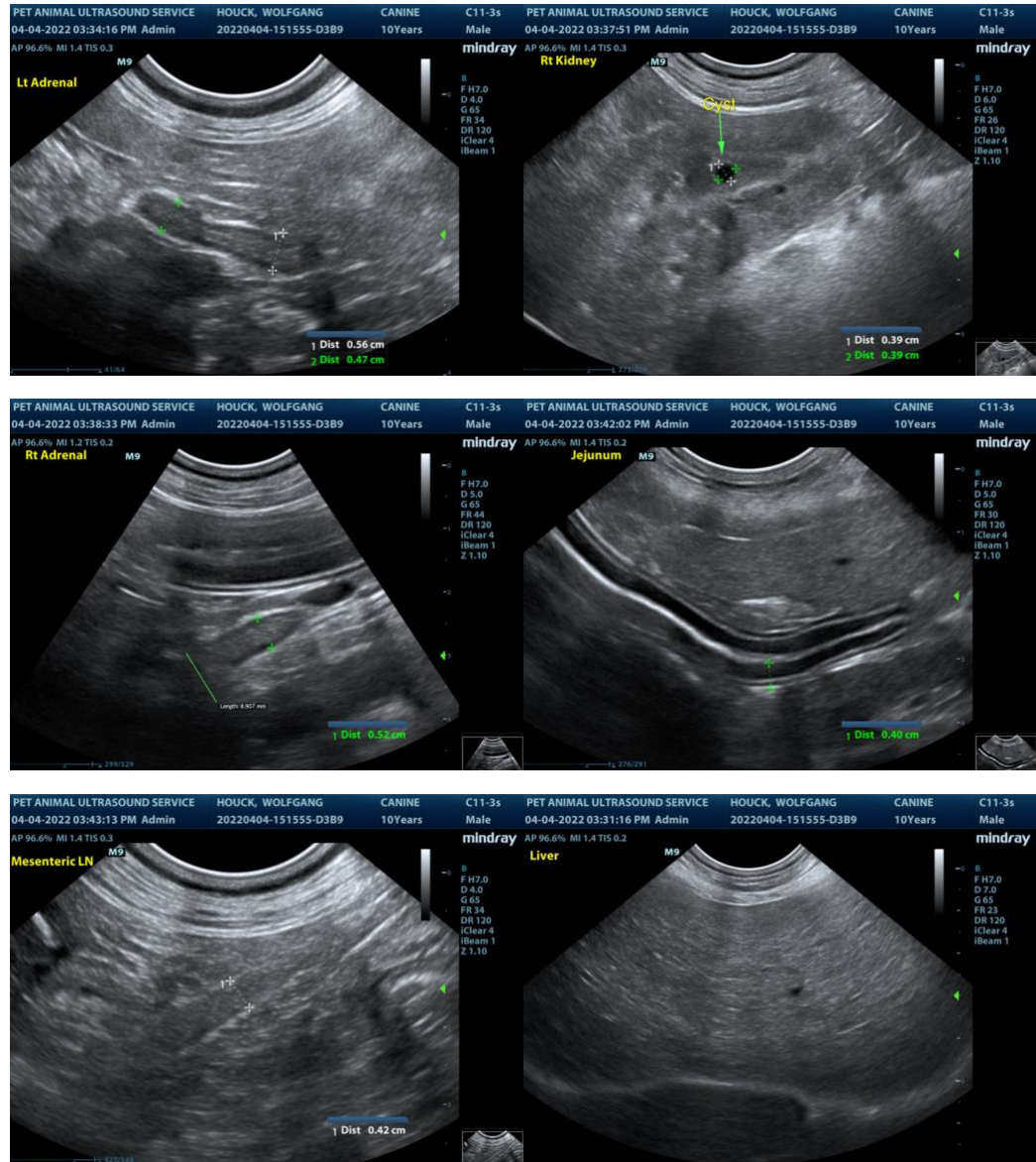
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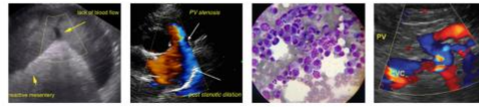
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Although not definitive, given the lack of reported hematemesis in this patient, potential focal duodenal ulceration and segmental to generalized inflammation is suspected. Gastric protectant protocol, including sucralfate, limited antigen to hydrolyzed canned diet trial with late evening feeding, given primary clinical signs in the morning with potential bilious vomiting. Sonographic reassessment of the duodenum in 3-4 weeks is recommended.





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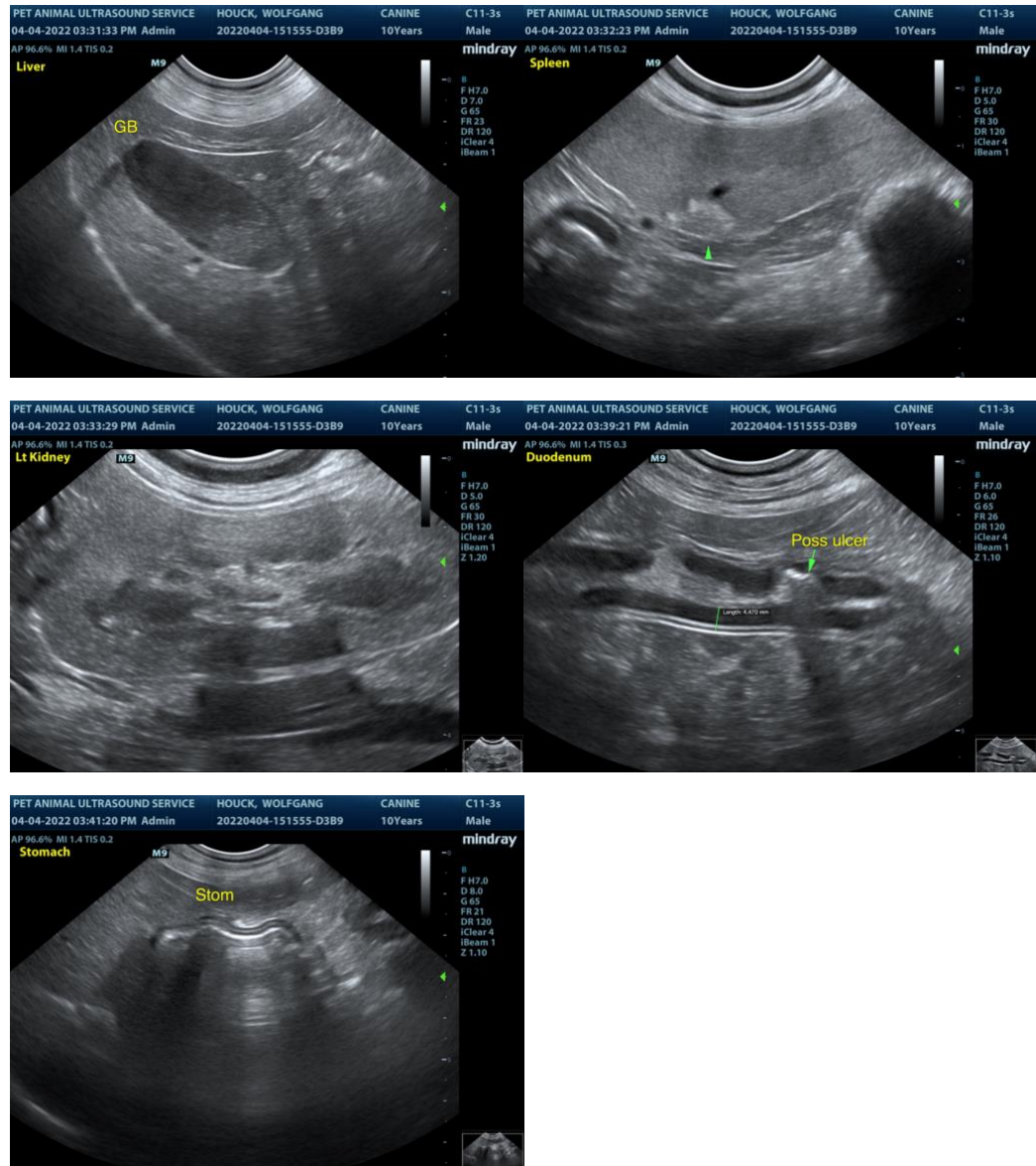
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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