



## PATIENT

Mookie Warren

## SPECIES

Canine

## BREED

Labrador Retriever

## SEX

MN

## AGE

5.5 yrs

## WEIGHT

34.3 kg

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Abby Gerenser

## HOSPITAL NAME

Abby Road VH

## REFERRING VET

Ashley Tichy

## INVOICE

10627

## DATE

2/11/26

## PRESENTING CLINICAL SIGNS

### History:

- Patient presented 2/6 because O says p has been throwing up every morning for the past week, having soft stool, and acting lethargic. Most of the week it was only bile but Friday morning it was undigested food. His appetite was decreased Thursday/Friday as well.
- History of elevated liver enzymes. New elevation in ALT and Total Bilirubin. See attached labwork to see changes. Treated with Maropitant, Famotidine, Visbiome, and Provable Fiber.
- When patient presented 2/10 for abdominal u/s there had been no further vomiting and patient seemed improved.
- Pet's diet: Hills low fat Hydrolyzed
- Current medications: Desmopressin

Abnormal PE/Chem/CBC/UA Results: PE: Tense on palpation. Rest of PE WNL CHEM: Chloride 108 (109 - 122 mmol/L) ALT 153 (10 - 125 U/L) ALP 717 (23 - 212 U/L) Bilirubin - Total 1.5 (0.0 - 0.9 mg/dL) CBC: RBC  $8.910^6/uL$  (5.7 - 8.7) MCHC 27.6g/dL (30.1 - 38.8) RDW 15.3% (11.8 - 13.9) MON  $0.610^3/uL$  (0 - 0.4) See attached lab work to see changes.

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

The urinary bladder, trigone, and cystourethral junction 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.

The area of the residual prostate appeared normal and free of pathology

No evidence of pathology in the area of the aortic trifurcation.

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 6.5 cm in length. The right kidney measured 6.8 cm in length.

### *Adrenal Glands*

The left adrenal gland was indistinctly visualized, exhibiting potential mild subnormal size, and subjectively measuring 0.5 cm width. The right adrenal gland was not definitively visualized.

### *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.

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***Liver/ Gallbladder***

The liver presented mildly enlarged in size. 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 containing primarily anechoic content with mild, gravity-dependent, nonorganized gallbladder debris.

***Gastrointestinal***

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty without evidence of retained ingesta, fluid, or foreign material. The pylorus wall width measured 0.70 cm in width. There was no evidence of obstruction to pyloric outflow.

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 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**

- Sonographically normal empty gastrointestinal tract
- Possible mild subnormal left adrenal gland
- Nonspecific yet benign hepatopathy
- Mild nonorganized gallbladder debris (non mucocele)

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Continued potentially long term low-fat hydrolyzed diet therapy and as-needed gastroprotectants are recommended. Screening cortisol level to rule out occult Addison's Disease is suggested.

The appearance of the liver was nonspecific but most consistent with benign hepatopathy. Considerations for the liver may include benign vacuolar / cholestatic hepatopathy, inflammatory/infectious/immune mediated disease, hyperplasia, hematopoiesis, toxic hepatopathy (i.e., copper), other with neoplasia thought less likely. Ultrasound guided FNA of the liver using a 25-gauge needle and assuming normal coagulation parameters would be warranted for screening cytology. Hepatosupportive medications such as Denamarin or Vitamin E, as well as Ursodiol due to its antioxidant and immunomodulatory effects within the liver, would be warranted, although these medications may not result in decreased hepatic enzyme levels. Leptospirosis titers / PCR may be considered if clinically indicated. Core or surgical biopsy is likely required for definitive diagnosis.



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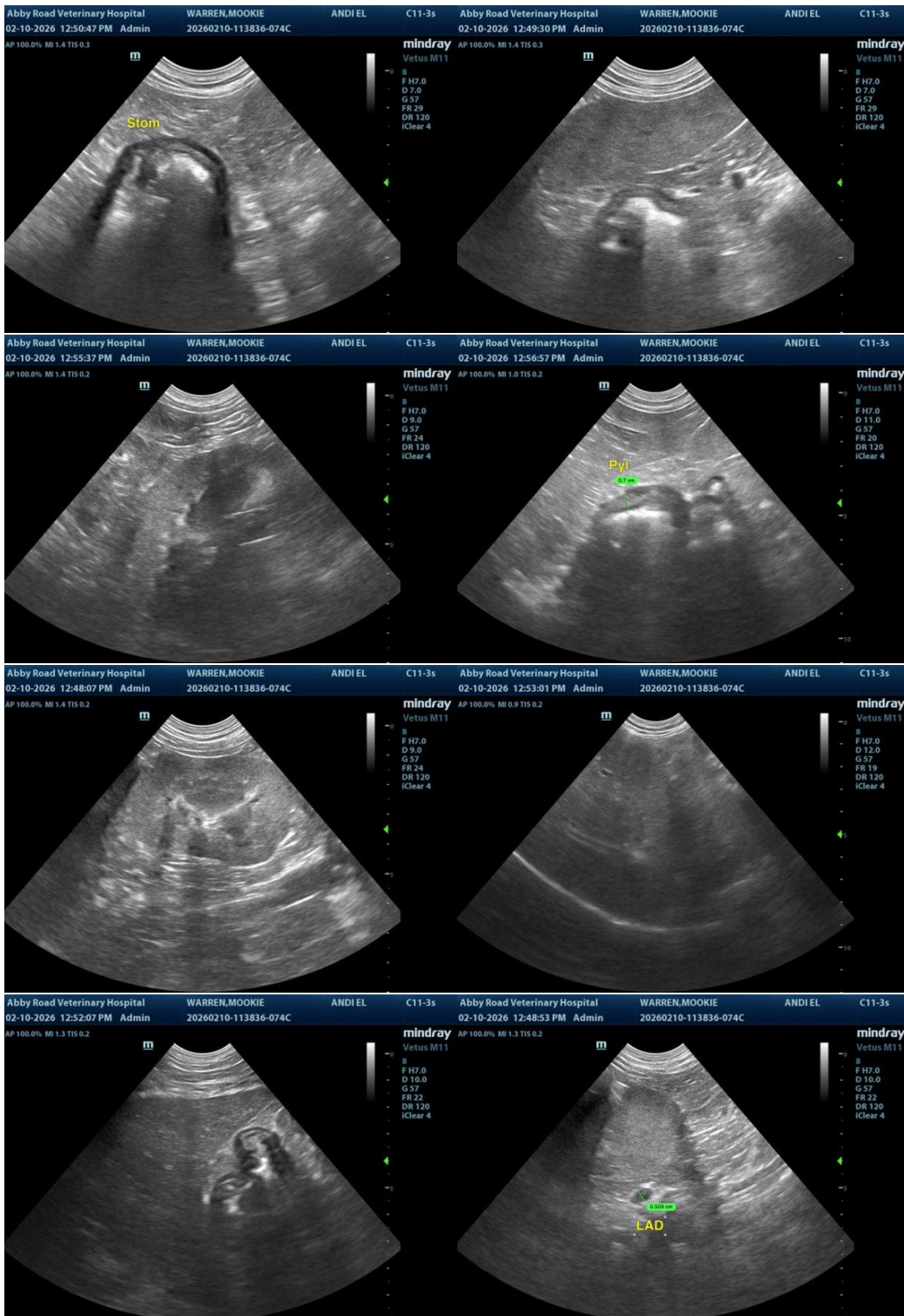
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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](mailto:info@sonopath.com)