

**PATIENT PRESENTING CLINICAL SIGNS**

Hamilton Cook Seen at VCA Salem Urgent Care for intermittent vomiting x 5 days--bloodwork revealed wbc=18.09,neutrophils =15.08, Hgb=11.5. Alk Phos=596, ALT=253. Radiographs revealed diffuse enlarged liver with rounded contour. hx of IBD/pancreatitis

**SPECIES**

Canine Abnormal PE/Chem/CBC/UA Results: bloodwork revealed wbc=18.09,neutrophils =15.08, Hgb=11.5. Alk Phos=596, ALT=253. Radiographs revealed diffuse enlarged liver with rounded contour  
Current Medications cerenia prn, denamarin sid, l-thyroxine 0.2 mg bid, pred sid, zyrtec sid, proviable probiotic sid  
Radiographic Findings Radiographs revealed diffuse enlarged liver with rounded contour

**BREED**

Keeshond

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**SEX**

**Urinary System**

MN

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with mild to moderate non-dependent particulate sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

**AGE**

9yr

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 mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 5.7 cm in length. The right kidney measured 6.3 cm in length.

**WEIGHT**

37.5lb

**INTERPRETED BY**

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

The area of the aortic trifurcation was free of pathology.

The residual prostate was free of pathology.

**IMAGING PERFORMED BY**

Sara Hansen

**Adrenal Glands**

The bilateral adrenal glands were normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The left adrenal gland measured 0.88 cm width at the caudal pole and 2.8 cm length. The right adrenal gland measured 0.59 cm width at the caudal pole.

**HOSPITAL NAME**

VCA Vitality

**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.

**REFERRING VET**

Dr. Calwson

**INVOICE**

11672ag

**Liver**

The liver was subjectively enlarged in size with normal 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 thin walls and primarily anechoic luminal content with mild hyperechoic non-shadowing luminal debris. The cystic and common bile ducts were normal.

**DATE**

09/19/2022



**PATIENT** *Gastrointestinal*

Hamilton Cook 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**

Canine

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.

**BREED**

Keeshond

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

**SEX**

MN

*Pancreas*

The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.

**AGE**

9yr

*Free Abdomen*

No overt lymphadenopathy or peritoneal effusion was present.

**WEIGHT**

37.5lb

**ULTRASONOGRAPHIC FINDINGS**

- Hepatomegaly exhibiting mild non-uniform remodeled parenchyma
- Mild hyperechoic gallbladder debris (non-mucocele)
- Sonographically unremarkable GI tract
- Mild pancreatic remodeling-potentially secondary to previous pancreatitis, possible low grade to chronic pancreatitis
- Urinary bladder sediment
- Mild age-related renal changes

**INTERPRETED BY**

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The urinary bladder sediment may suggest cellular / crystalline debris or mucus. Cystocentesis for UA +/- C/S if evidence of inflammatory cells is recommended.

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Consideration for the liver may include metabolic, reactive or vacuolar hepatopathy, inflammatory/immune mediated disease, non-obstructive cholestasis or other with neoplasia considered unlikely.

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Further assessment may include screening hepatic FNA cytology assuming normal clotting status. The addition of Ursodiol to current medications may prove beneficial.

A spec cPL could be considered for further assessment of underlying low grade to chronic pancreatitis. AS needed GI support with potential dietary therapy may prove beneficial.

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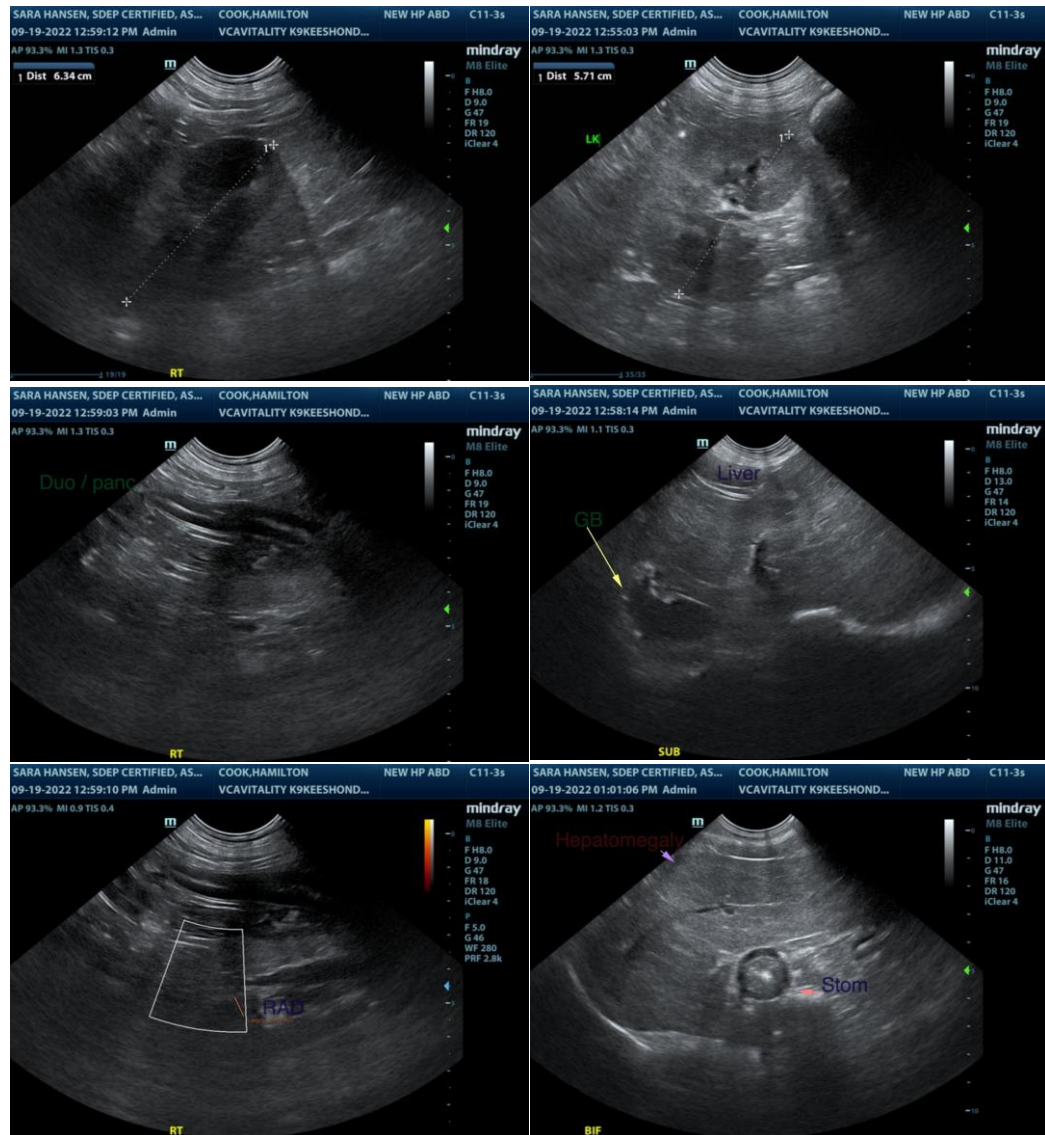
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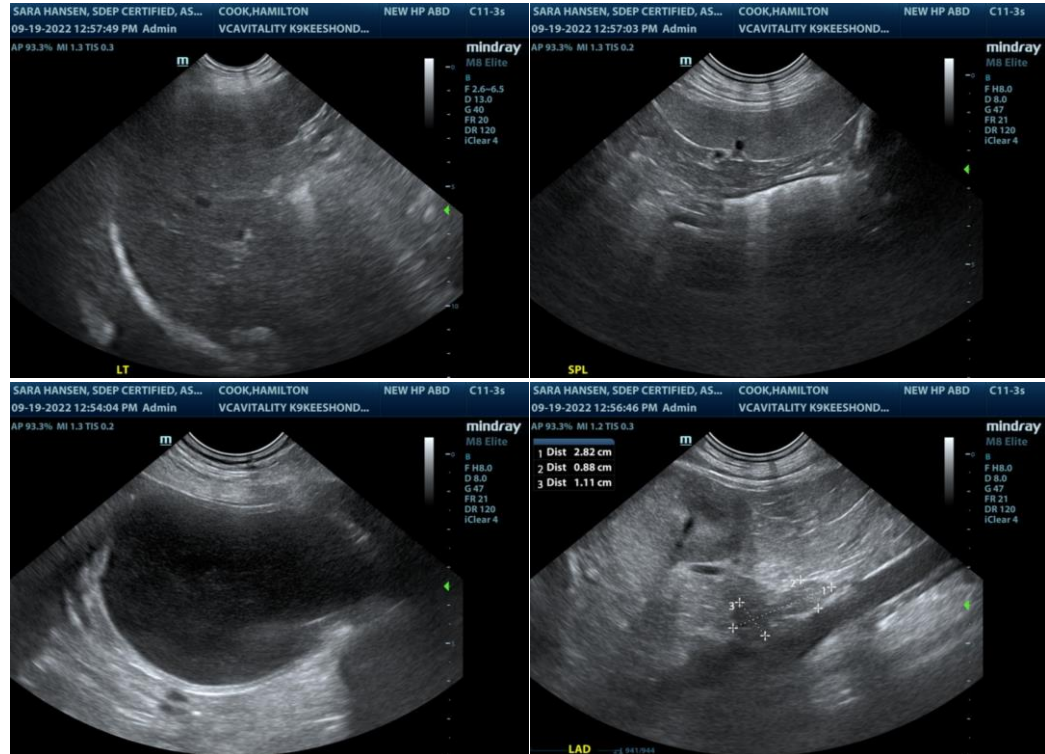
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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)

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