


**PATIENT PRESENTING CLINICAL SIGNS**

Jack Brown History: Progression of heart murmur, previously Grade 2/6 now a grade 4/6 systolic PMI left side. Vomiting and lethargy, reduced appetite. Maropitant SID and vomiting has resolved.

**SPECIES** Abnormal PE/Chem/CBC/UA Results: Elevated SDMA, Urea/Creatinine high end of normal, TP 92, Globulins 60, ALT 427, Cholesterol 6.05, Amylase 1527.

Feline

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**
**BREED**  
*Urinary System*

DSH

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 cm exhibited normal thickness and tone. Primarily anechoic urine was present in the lumen. Mild nondependent particulate sediment was present without evidence of calculus formation. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic mural changes were noted. Aortic trifurcation was normal.

**SEX**

Neutered Male

**AGE**

15 Years

Normal renal size with asymmetrical margination was present in both kidneys. The renal cortex presented uniformly increased in echogenicity with uniform echotexture. The renal cortex appeared to be hypertrophied resulting in an altered cortex: medulla ratio. Mild loss of corticomedullary distinction was also present. The renal medullary volume was subjectively reduced. The left kidney measured 3.9 cm in length. The right kidney measured 4.1 cm in length.

**WEIGHT**

6.65 kg

*Adrenal Glands*

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.45 cm width.

**INTERPRETED BY**

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

The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.36 cm width.

*Spleen*
**IMAGING PERFORMED BY**

Crystal Hill

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.

**HOSPITAL NAME**

New Hamburg VC

*Liver*

The liver was normal in size and contour with subjective mild increased hepatic parenchyma echogenicity compared to the spleen, exhibiting mild coarse echotexture. No hepatic masses or nodules noted.

**REFERRING VET**

Dr. Von Hausen

The gallbladder was non-distended in size with primarily anechoic content with focal small areas of luminal mineral to small choleliths. The gallbladder walls were overtly normal without evidence of inflammatory criteria. The cystic and common bile ducts were normal.

**INVOICE**

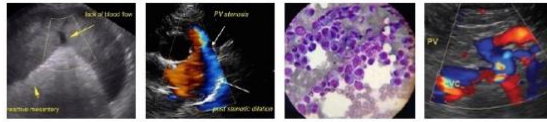
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*Gastrointestinal*

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. The gastric body wall measured 0.25 cm.

**DATE**

3/29/22



**PATIENT**

Jack Brown

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. The jejunum wall measured 0.22 cm. The ileocolic wall measured 0.39 cm.

**SPECIES**

Feline

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

**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.

**BREED**

DSH

**Free Abdomen**

No omental masses, lymphadenopathy or peritoneal effusion was present.

**SEX**

Neutered Male

**ULTRASONOGRAPHIC FINDINGS**

**AGE**

15 Years

- Mild urinary bladder sediment- likely cellular debris/protein or crystalline debris
- Bilateral, nonspecific chronic renal changes
- Probable inflammatory hepatopathy- suspect cholangiohepatitis
- Mild heterogeneous pancreas
- Overtly normal gastrointestinal tract

**WEIGHT**

6.65 kg

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**INTERPRETED BY**

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

Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered.

**IMAGING PERFORMED BY**

Crystal Hill

Inflammatory hepatic parenchymal disease or hepatobiliary process (i.e., cholangiohepatitis) suspected without overt evidence of neoplastic criteria. Assuming normal clotting status, hepatic FNA, using a 25-gauge needle could be considered for screening cytology and potential identification of inflammatory cell type (if present).

**HOSPITAL NAME**

New Hamburg VC

The pancreas in this patient was not overtly consistent with active or primary pancreatitis as an obvious cause of the patients clinical signs. Potential for low-grade pancreatitis or structurally insignificant inflammatory bowel disease (i.e., triad disease) could be a consideration in this patient. Further assessment may include a GI panel to include PLI/TLI/Cobalamin/Folate.

**REFERRING VET**

Dr. Von Hausen

Empirically, continued as needed gastrointestinal support, novel protein or hydrolyzed diet, broad spectrum deworming, if clinically indicated, +/- conservative triad disease protocol would be reasonable. Monitoring of blood pressure suggested given the renal presentation.

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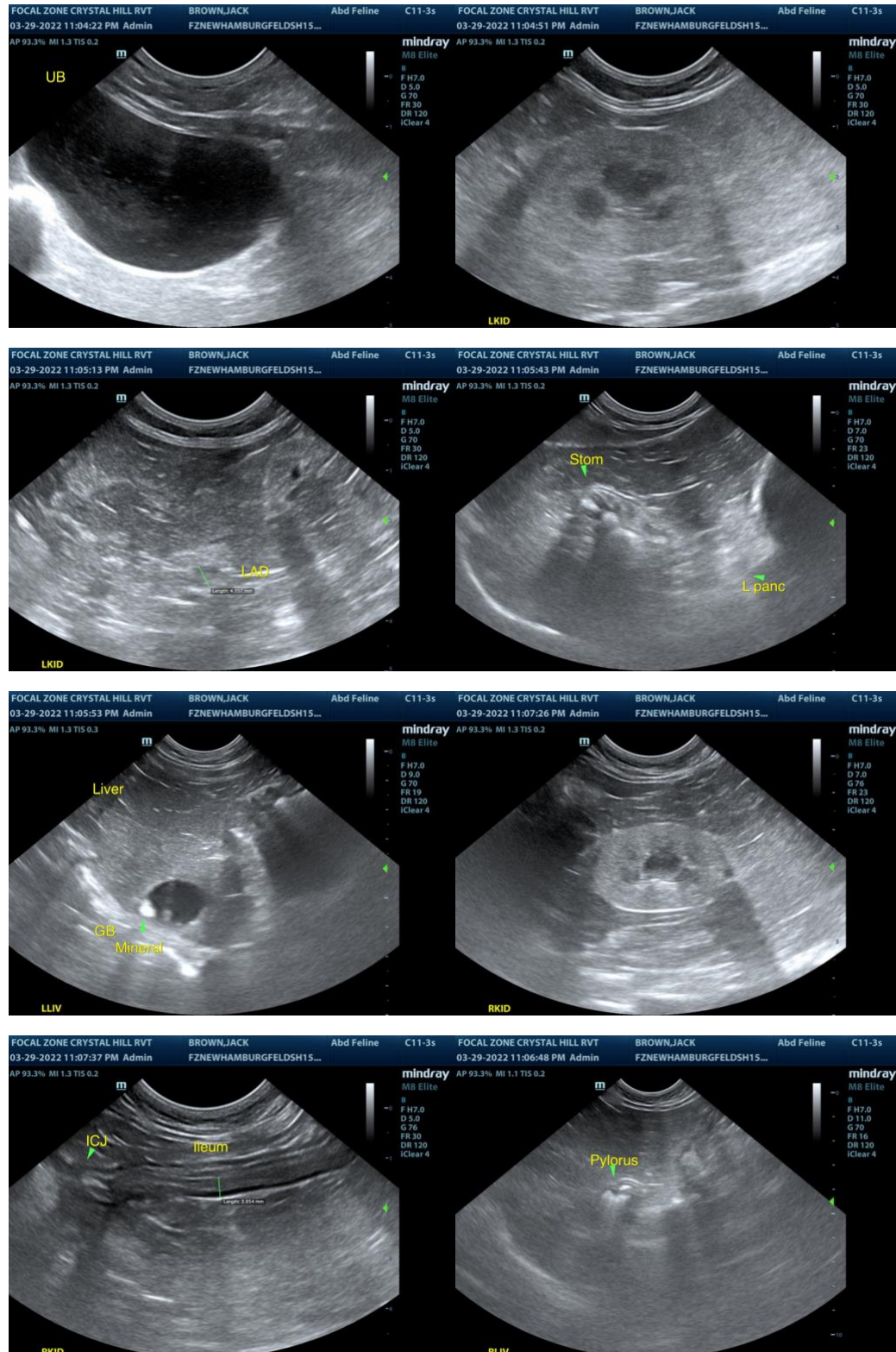
Dr. Von Hausen

**INVOICE**

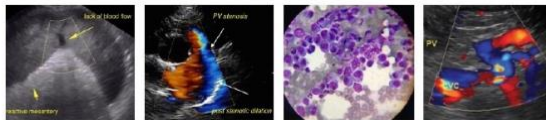
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.



**PATIENT**

Jack Brown

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.

**SPECIES**

Feline

**R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)**  
[info@SonoPath.com](mailto:info@SonoPath.com)

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