


**PATIENT PRESENTING CLINICAL SIGNS**

Gizmo Caughey History of vomiting and diarrhea, pale colour and dehydrated, grade 5/6 heart murmur. History of pancreatitis but hadn't resolved. No abdominal tension on palpation. Started Tylosin, Metronidazole, Cerenia, Sulcrate.

**SPECIES** Abnormal PE/Chem/CBC/UA Results: Spec CPL elevated. elevated Lipase and Creatinine Kinase

Canine

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

Shih Tzu

The urinary bladder 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.

**SEX**

No overt pathology associated with the residual prostate or proximal urethra.

Neutered Male

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 4.7 cm. The right kidney measured 5.1 cm.

**AGE**

11 Years

The area of the aortic trifurcation was free of pathology.

**WEIGHT**

5.4 kg

**Adrenal Glands**

The adrenal glands were uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.46 cm at the cranial pole and 0.37 cm at the caudal pole. The right adrenal gland measured 0.42 cm at the cranial pole and 0.55 cm at the caudal pole.

**INTERPRETED BY**

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

**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.

**IMAGING PERFORMED BY**

Crystal Hill

**Liver**
**HOSPITAL NAME**

Chippawa AH

The liver presented normal in size. The hepatic parenchyma revealed diffuse reduced echogenicity compared to the spleen and renal cortical parenchyma with a mild coarse echotexture. Increased portal vein prominence was evident. The capsule of the liver was normal in margination. Distinct masses or nodules were not evident. The hepatic and portal vasculature were normal in appearance. The gallbladder was non distended in size with mild, echogenic, nonmineralized biliary sludge. The cystic duct and common bile ducts were normal without evidence of dilation.

**REFERRING VET**

Dr. Dowell

**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. Gastric body wall measured 0.4 cm.

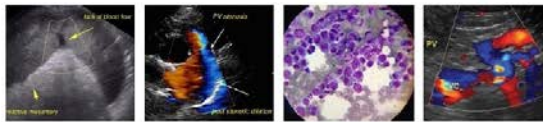
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The small intestine presented intact wall layering with primarily maintained 1:3 muscularis/mucosa ratio with subjective propensity for subtly prominent to echogenic submucosa layer. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material. Duodenum wall measured 0.4 cm. Jejunum wall measured 0.35 cm.

**DATE**

10/6/21



**PATIENT**

Gizmo Caughey

The colon exhibited intact yet subjective mild generalized prominent wall layering along with generalized semiformed, soft feces.

**Pancreas**

**SPECIES**

Canine

The left limb, right limb, and base of the pancreas presented hypoechoic to heterogeneous echogenicity compared to adjacent omental fat. Mild asymmetrical capsule margination was present with mild variable parenchymal swelling and mild peripancreatic inflammation. No overt evidence of neoplasia.

**BREED**

Shih Tzu

**Free Abdomen**

No overt lymphadenopathy or peritoneal effusion was present.

**ULTRASONOGRAPHIC FINDINGS**

**SEX**

Neutered Male

- Enterocolonopathy – suspect inflammatory bowel with concurrent mild colitis
- Mild chronic active pancreatitis
- Subjective mild hypoechoic liver

**AGE**

11 Years

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

GI panel to include PLI, TLI, cobalamin and folate as well as fresh fecal analysis to assess for parasitic ova/giardia. Overall, no overt evidence of significant gastrointestinal or colonic mural pathology, yet the small intestine exhibited subjective subtle mural changes suggestive of inflammation.

**WEIGHT**

5.4 kg

Empirically, a limited antigen, hydrolyzed, or bland diet trial with potential long term dietary therapy, prophylactic deworming (Panacur 50 mg/kg SID x 5 consecutive days with repeat protocol in 3 weeks even if fecal testing is negative), high colony count probiotic (Proviale or Visbiome), antibiotic trial and as needed gastrointestinal support with assessment of clinical response may prove beneficial. Intestinal biopsies may be indicated if GI signs continue despite empirical therapy.

**INTERPRETED BY**

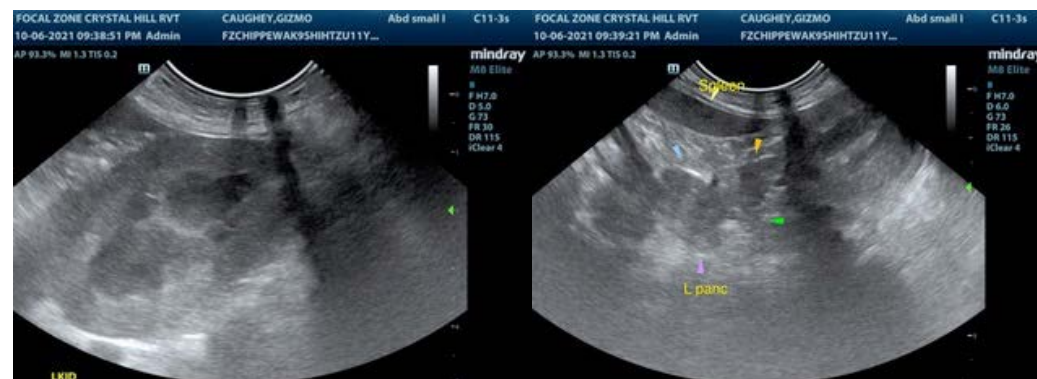
R. McKenzie Daniel, DVM,  
DABVP (Canine and  
Feline)

If a GI panel is not elected, empirical cobalamin supplementation may also prove beneficial. The subjective hypoechoic liver was non-specific and may be a normal patient variant, or reactive hepatopathy secondary to intestinal inflammation or pancreatitis.

**IMAGING**

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**PATIENT**

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**SPECIES**

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**BREED**

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**SEX**

Neutered Male

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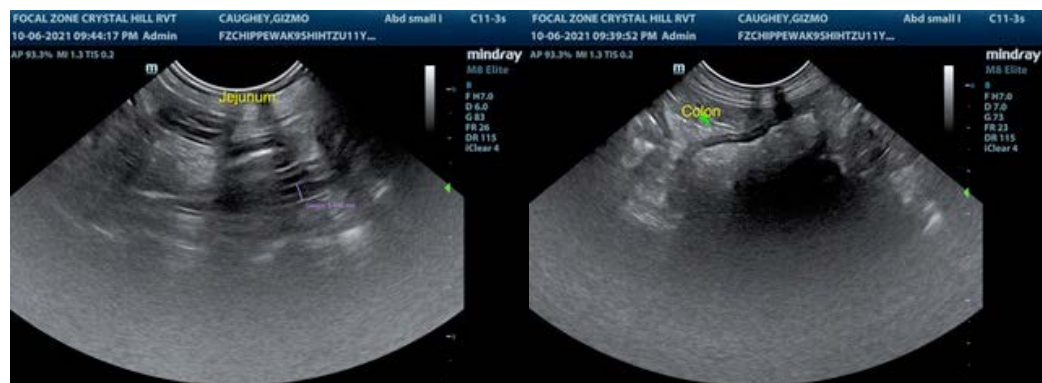
Dr. Dowell

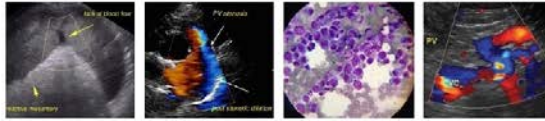
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**PATIENT**

Gizmo Caughey

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.

**SPECIES**

Canine

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.

**BREED**

Shih Tzu

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

**SEX**

Neutered Male

**AGE**

11 Years

**WEIGHT**

5.4 kg

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