

**PATIENT PRESENTING CLINICAL SIGNS**

**Rudy Honey** History: Several months intermittent vomiting, diarrhea, possible vestibular disease  
 Medication: Denamarin

**SPECIES** Labs: CBC – Hct 54.9, WBC 16.3. Chem – ALP 307, TBili 1.2, Calcium 7.2, Lipase 5850, Amylase >2500,  
**Canine** Sodium Potassium ratio 23.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED** *Urinary System*

The urinary bladder presented 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**

Neutered Male

The residual prostate was symmetrically normal in size with uniform parenchyma and slight coarse echotexture. The prostate measured 1.3 cm diameter. The post-prostatic urethra exhibited mild prominent size, yet normal overall structure and tone to a depth of 3.0 cm.

**AGE**

12 years

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 mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. Small cortical cysts were present in both kidneys. The left kidney measured 5.9 cm. The right kidney measured 5.9 cm.

**WEIGHT**

37 Pounds

*Adrenal Glands*

The adrenal glands were uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.73 cm at the cranial pole and 0.88 cm at the caudal pole. The right adrenal gland measured 1.3 cm at the cranial pole and 0.62 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**

Rebekah Jakum, CVT  
 ARDMS/RVT

*Liver*

The liver exhibited potential for mild generalized enlargement. 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 with mild, echogenic, nonmineralized biliary sludge. The cystic duct and common bile ducts were normal without evidence of dilation.

**HOSPITAL NAME**

Village Veterinarian

**REFERRING VET**

Dr. Longenecker

*Gastrointestinal*

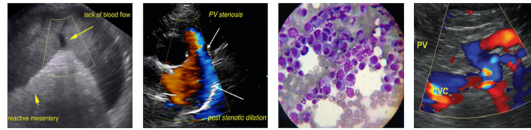
**INVOICE**

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The stomach presented intact wall layering with a normal wall layer ratio. Generalized mild to moderate gas distention present. The presence of luminal gas prohibited full evaluation of the gastric interior, yet no overt evidence of retained ingesta, fluid or foreign material.

**DATE**

8.31.2021



**PATIENT** Rudy Honey  
The small intestine presented intact wall layering with subjective propensity for segmental to generalized 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 0.56 cm. Jejunum wall measured 0.43 cm.

**SPECIES** Normal visible colon wall layers were present with subjective semiformal feces.

**BREED** *Pancreas*  
Canine

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

**SEX** Neutered Male  
**BREED** *Free Abdomen*  
No overt lymphadenopathy or peritoneal effusion was present.

- AGE** 12 years  
**WEIGHT** 37 Pounds  
**PRIMARY FINDINGS**
- Mild to moderate gas distended stomach
  - Segmental prominent to echogenic small bowel submucosa layer – potential inflammatory bowel.
  - Heterogeneous pancreas – patient variant, parenchymal remodeling owing to previous inflammation, or low-grade to chronic inflammation possible.
  - Benign hepatopathy
  - Mild gallbladder debris (non-mucocele)

- SECONDARY FINDINGS**
- Mild chronic renal changes with small cortical cysts

**INTERPRETED BY** R. McKenzie Daniel, DVM, DABVP (Canine and Feline)  
**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**  
Although not definitive, the small intestine exhibited subtle mural changes, specifically prominent to echogenic submucosa, which tends to be more affected in dogs with underlying inflammatory enteropathy/IBD. GI panel to assess serum cobalamin and folate levels, and fresh fecal analysis to rule out parasitic ova/giardia may be considered. Resting cortisol is also recommended.

**IMAGING PERFORMED BY** Rebekah Jakum, CVT ARDMS/RVT  
Empirically, a limited antigen or hydrolyzed 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 (Provable 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.

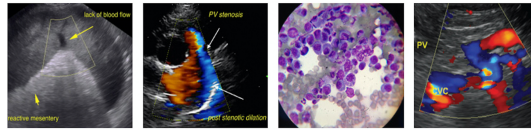
**HOSPITAL NAME** Village Veterinarian  
Continued Denamarin +/- Ursodiol is recommended.

**REFERRING VET** Dr. Longenecker

**INVOICE** 25097

**DATE** 8.31.2021





**PATIENT**

Rudy Honey

**SPECIES**

Canine

**BREED**

**SEX**

Neutered Male

**AGE**

12 years

**WEIGHT**

37 Pounds

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Rebekah Jakum, CVT  
ARDMS/RVT

**HOSPITAL NAME**

Village Veterinarian

**REFERRING VET**

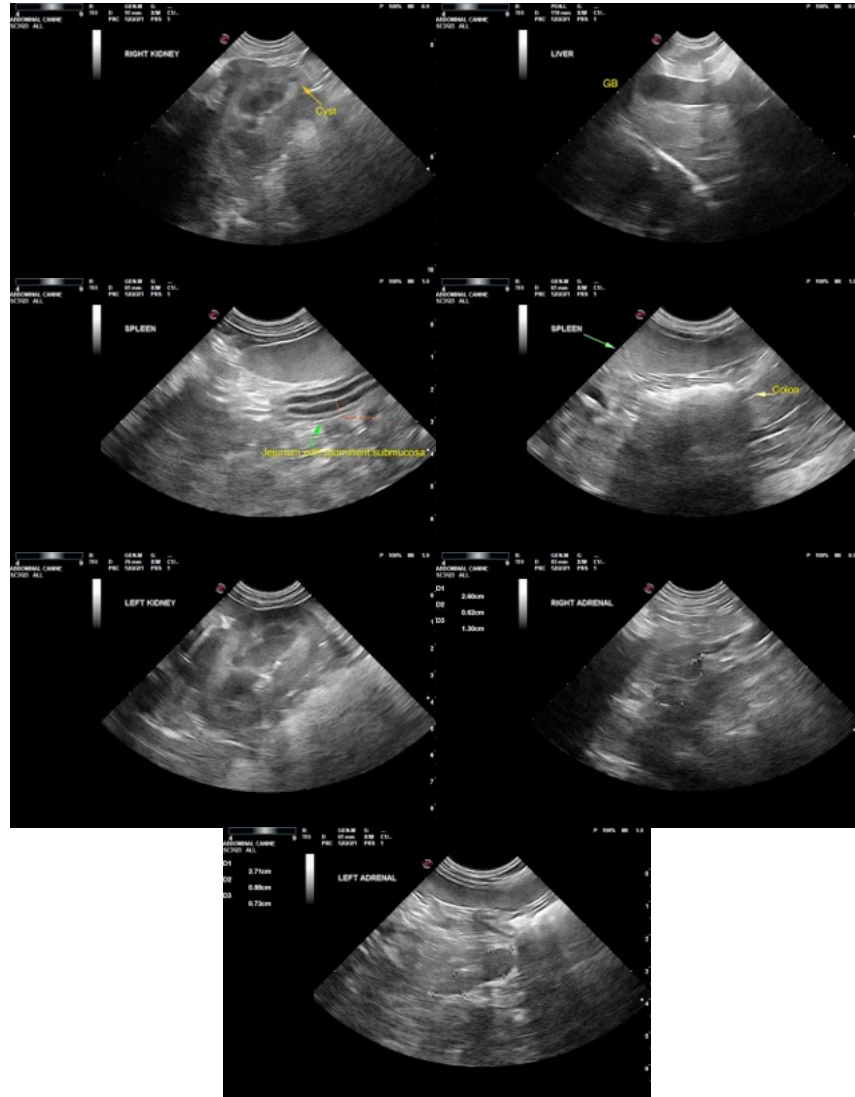
Dr. Longenecker

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**DATE**

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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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