



**PATIENT PRESENTING CLINICAL SIGNS**

**PATIENT** Charlie Ward  
**SPECIES** Canine  
**BREED** Rottweiler

History: Picked up two weeks ago and had diarrhea since purchase. Was seen last Thursday for bloody diarrhea with mucus and one bout of vomiting. Was dehydrated and quite dumpy at that time, put on IVF for 2 days and started Metronidazole. Seemed a bit perkier. Fecal came back positive for Coccidia, Giardia, Rounds and puppy is now passing tapeworms as well. Started Fenbendazole and TMS and Fortiflora for parasite load. Seemed better over weekend but Monday reported him being restless at night and having a distended and uncomfortable abdomen, started Gabapentin for pain. Yesterday vomited again and this AM ate breakfast and then vomited all food undigested kibble about 2 hours later. Quite uncomfortable and lethargic during scan.

Abnormal PE/Chem/CBC/UA Results: Parvo Test Negative

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**SEX** *Urinary System*

**Intact Male**  
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.

**AGE** 9.5 Weeks  
No overt pathology in the area of the prostate gland.

**WEIGHT** 3.72 kg  
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 4.9 cm in length. The right kidney measured 4.5 cm in length.

**INTERPRETED BY** *Adrenal Glands*

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)  
The left adrenal gland was subjective normal to possible mild subnormal size yet normal position and shape. The left adrenal gland measured 1.6 cm in length x 0.29 cm width at the caudal pole.

The right adrenal gland was indistinctly visualized yet without overt pathology, subjectively measuring 0.61 cm in width.

**IMAGING PERFORMED BY** *Spleen*

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** *Liver*

Burford VH  
The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion.

**REFERRING VET** Dr. Richards  
**INVOICE** 15838  
The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal.

*Gastrointestinal*

**DATE** 6/2/22  
The stomach presented intact and overtly normal wall layering. The stomach exhibited moderate distention with retained hyperechoic ingesta and chyme. Focal to regional areas of progressive distal



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acoustic shadowing associated with the gastric ingesta noted. No overt evidence of mechanical pyloric outflow obstruction. The ventral gastric body wall measured 0.31 cm.

**SPECIES**

Canine

The small intestine presented intact yet generalized prominent wall layering owing to propensity for generalized prominent mucosa. Mild areas of segmental duodenojejunal nonshadowing chyme was present. No evidence of small intestinal mechanical/metabolic ileus pattern. The duodenum wall measured 0.38 cm. The jejunum wall measured 0.31 cm. No evidence of loss of intestinal wall layering or other structural pathology, such as obvious intussusception.

**BREED**

Rottweiler

with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material.

**SEX**

Intact Male

The colon exhibited intact and overtly normal wall layering with mild to moderate colonic distention with semi-formed to soft feces, consistent with reported diarrhea. The descending colon wall measured 0.20 cm.

**AGE**

9.5 Weeks

**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**

**WEIGHT**

3.72 kg

Intermittent mesenteric nodes were present. The lymph nodes were essentially isoechoic to adjacent omentum without evidence of peripheral inflammation and maintaining a normal width: length ratio (<0.5). An example of mesenteric lymph node size measured 2.3 cm x 0.87 cm.

Mild volume anechoic peritoneal free fluid was present.

**INTERPRETED BY**

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

**ULTRASONOGRAPHIC FINDINGS**

- Moderate retained gastric ingesta
- Intact yet subjective prominent small bowel walls
- Intermittent subjective benign/reactive mesenteric lymph nodes- lymphoid hyperplasia, minor reactive lymphadenitis or immunologic immaturity likely.
- Mild volume peritoneal free fluid- nonspecific (if normal albumin levels), potential incidental finding given the patients age.

**IMAGING PERFORMED BY**

Crystal Hill

**HOSPITAL NAME**

Burford VH

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The overall gastrointestinal presentation was nonspecific with considerations, including viral, bacterial, parasitic, gastrointestinal disease, dietary intolerance/food hypersensitivity, dietary indiscretion, inflammatory bowel disease, dysbiosis without overt evidence of obstructive or neoplastic criteria. Potential for inefficient gastric emptying or gastric stasis possible, along with the possibility of generalized inefficient gastrointestinal peristalsis. Technically, the possibility of a small amount of nonobstructive gastric foreign material cannot be excluded yet thought less likely.

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A GI panel to include PLI/TLI/Cobalamin/Folate is recommended. Resting cortisol to assess for or rule out occult Addisons disease is suggested.

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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



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as needed gastrointestinal support with assessment of clinical response may prove beneficial. Intestinal biopsies may be indicated if GI signs continue despite empirical therapy.

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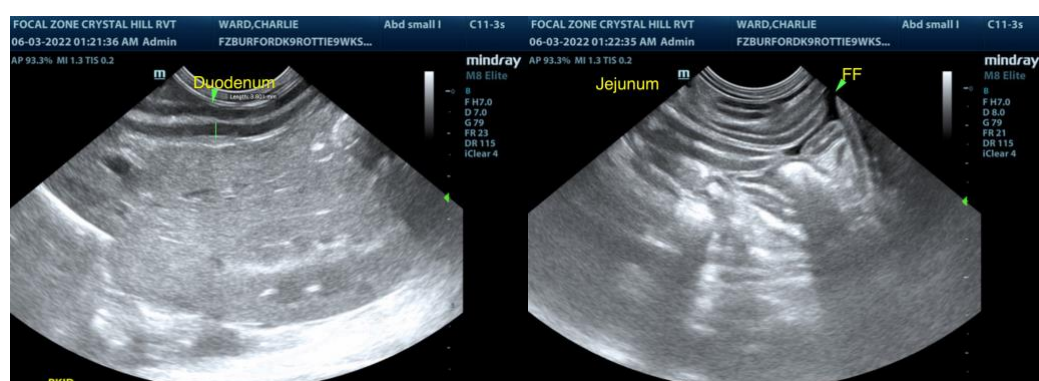
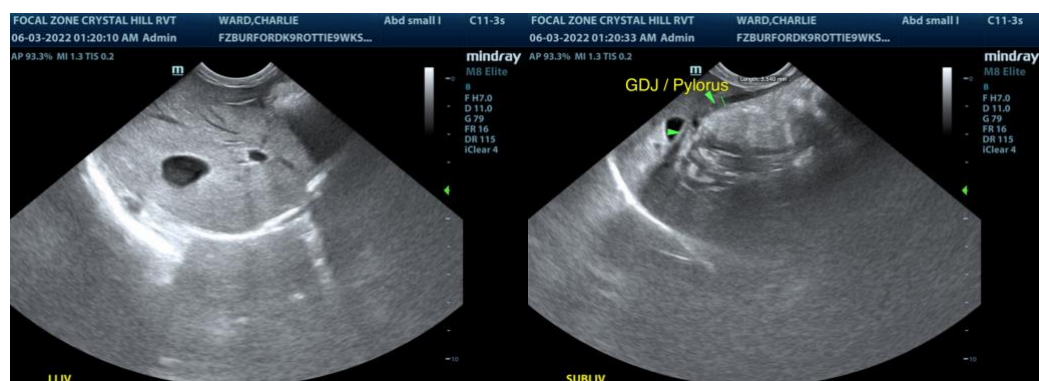
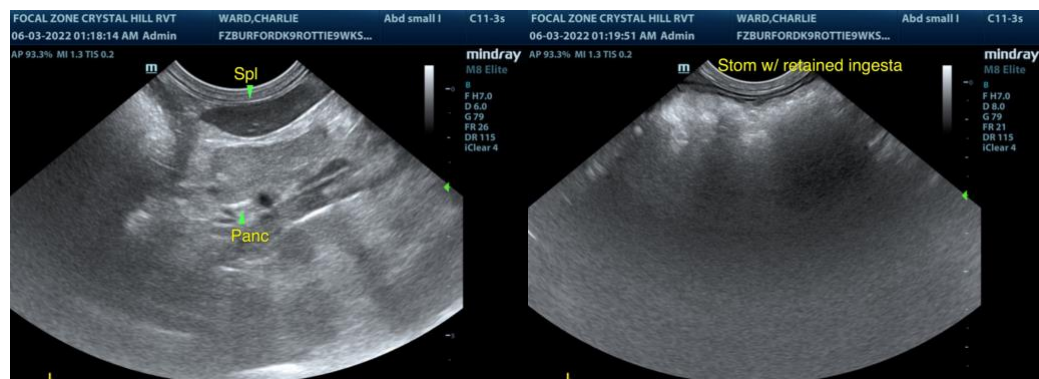
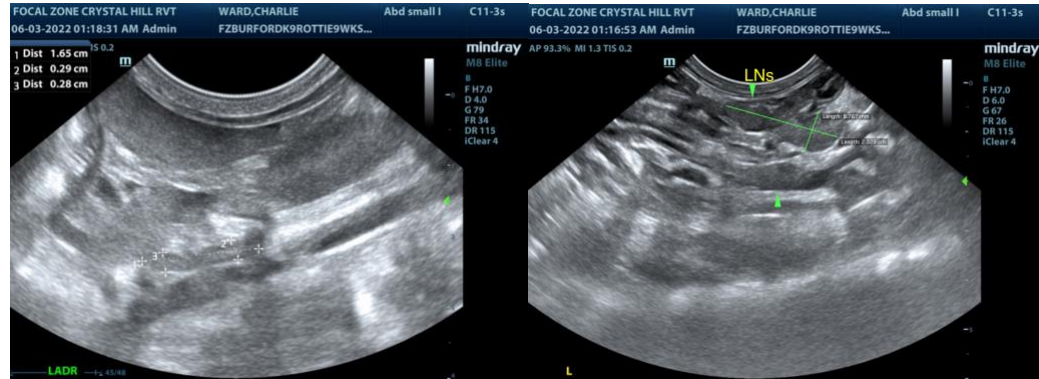
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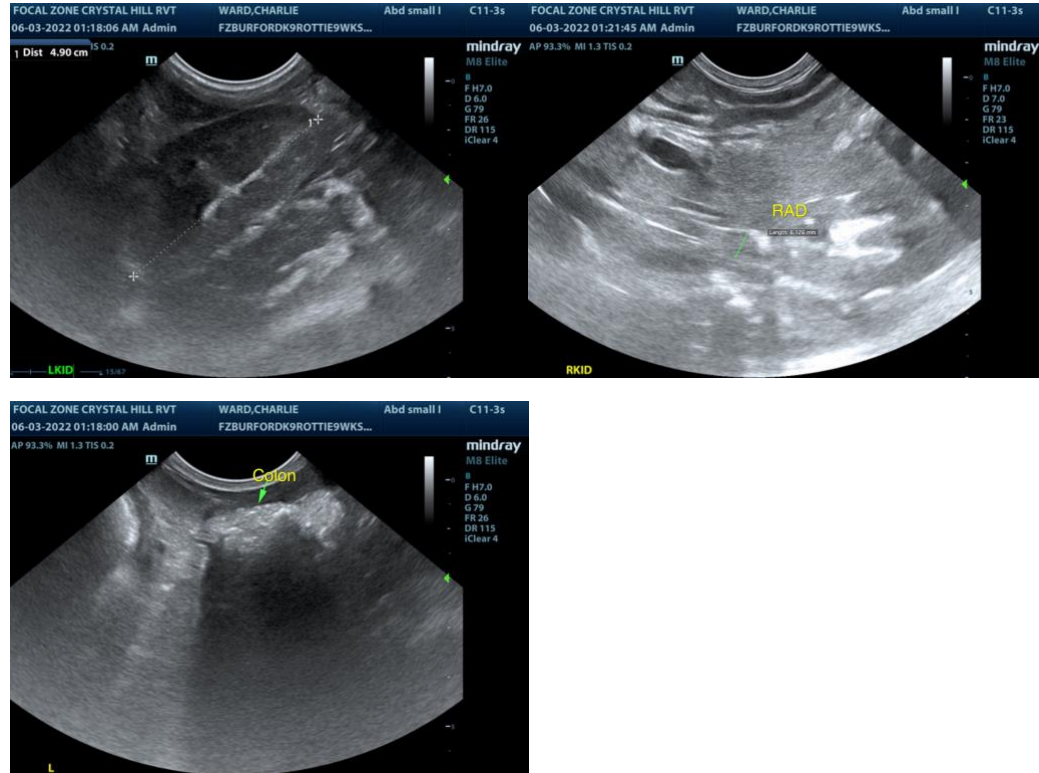
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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