

**DATE PRESENTING CLINICAL SIGNS**

8/15/22 Routine annual exam new anemia noted. Survey x-rays NSF, 4dx and fecal negative.

**PATIENT**

Samson Devereaux

Current Medications: Panacur trial last week.  
 Lab Results: 10/22- HCT 52, was 34 on annual last week, now 31- path review NSF, mild regeneration.  
 Date of Previous IntraPet Ultrasound: No previous.  
 Sedation: Not required to complete full diagnostic ultrasound.  
 Stat Report: Not requested.

**SPECIES**

Canine

**BREED**

Corgi

**SEX**

Neutered Male

**AGE**

1/1/10

**WEIGHT**

22.6 Pounds

**INTERPRETED BY**Beth Johnson, DVM  
DACVIM**IMAGING PERFORMED BY**

Rachel Brilhart RDMS

**HOSPITAL NAME**

Belvedere Vet Center

**REFERRING VET**

Dr. Molinelli

**INVOICE**

40457

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

The urinary bladder is moderately distended with anechoic contents. No masses or inflammatory changes. Several small cystoliths are present along the dependent wall measuring approximately 0.20 cm in diameter. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Prostate is normal in size, echotexture and echogenicity for a neutered male.

The right kidney is normal in size (5.45 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia or infarcts observed. Non-obstructive linear multifocal hyperechoic diverticular foci with acoustic shadowing are noted.

The left kidney is normal in size (5.96 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia or infarcts observed. Non-obstructive linear multifocal hyperechoic diverticular foci with acoustic shadowing are noted.

**Adrenal Glands**

The right adrenal gland is normal in size (2.15 cm long x 0.74 cm at the cranial pole and 0.69 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (2.35 cm long x 0.56 cm at the cranial pole and 0.78 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**Spleen**

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

**Liver**

Liver is subjectively enlarged (swollen contour) without disruption of architecture. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal portal vein walls and increased echogenicity relative to the spleen and falciform fat. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

### ***Gastrointestinal***

Very mild fundic mucosal hypertrophy with mild hyperechoic mucosa and some mild mucosal remodeling is noted. There is no loss of mural detail. Layering is normal. There is mild luminal fluid accumulation. No evidence of masses/nodules or foreign material present.

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

### ***Pancreas***

The observed pancreas appears appropriately isoechoic to surrounding omental fat. The capsule is mildly irregular in shape. Parenchyma is mildly heterogenous and coarse. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

### ***Free Abdomen***

There is no evidence of free peritoneal effusion noted in these images.

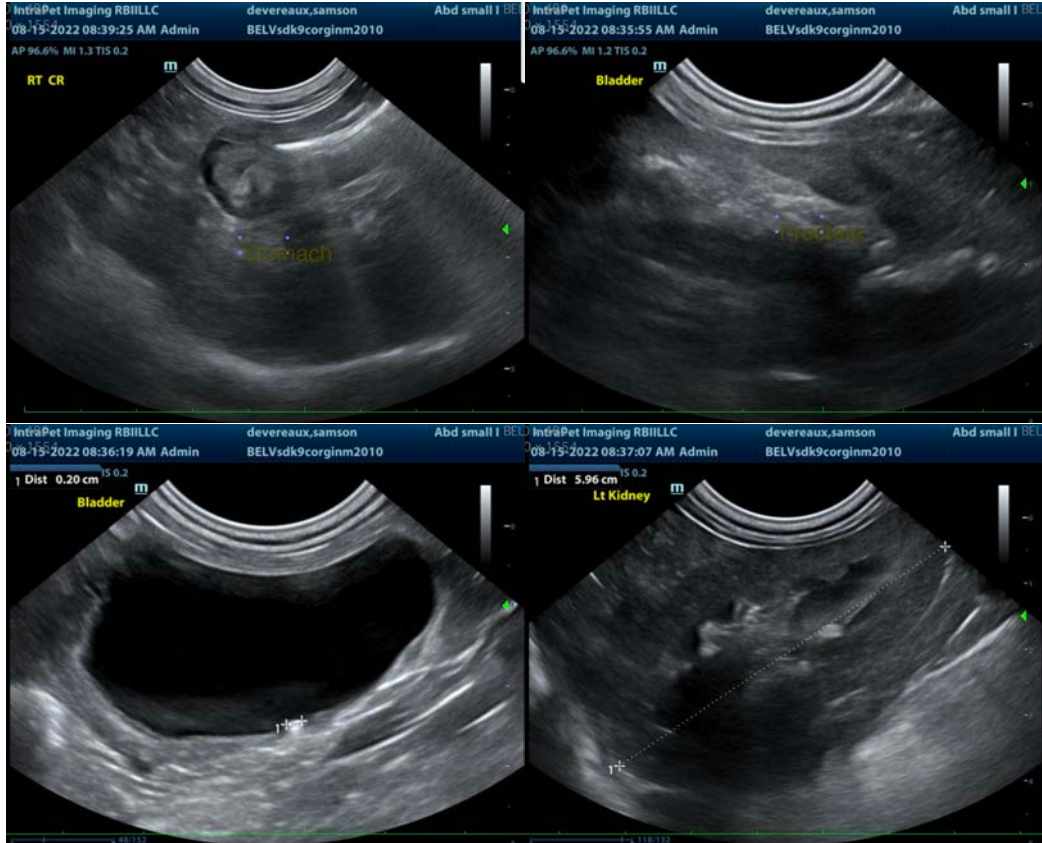
There is no apparent lymphadenopathy noted in these images.

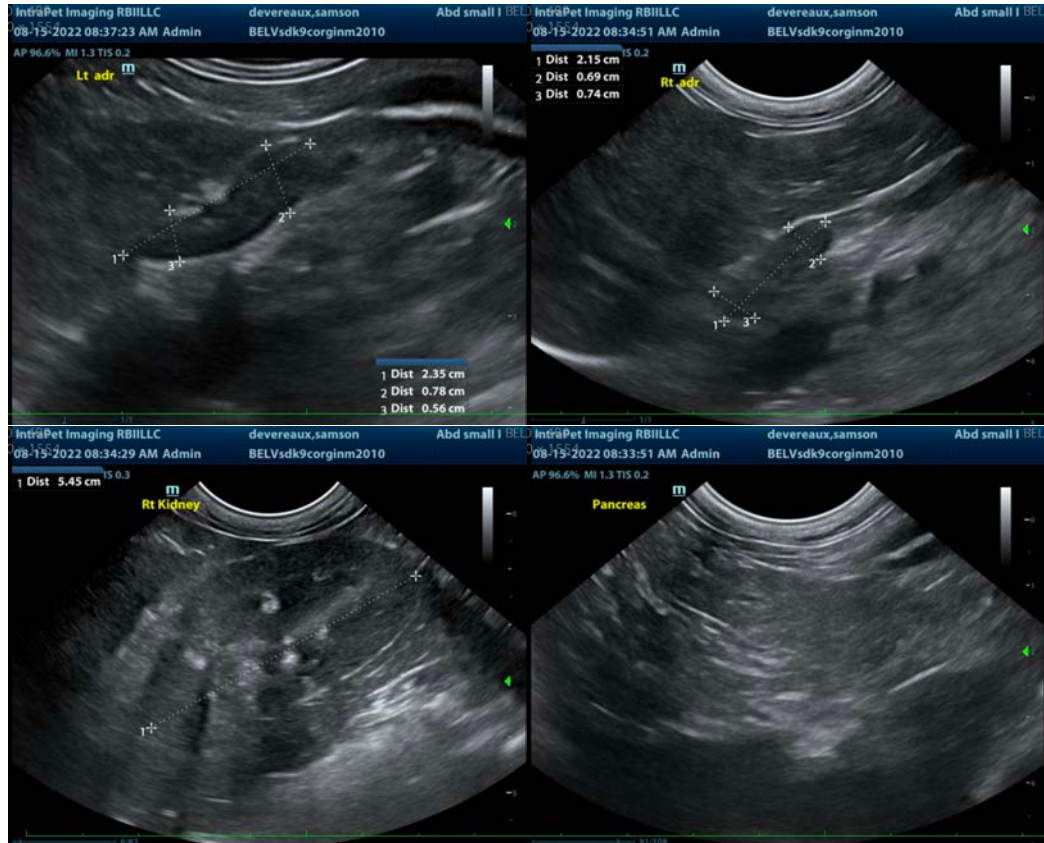
## **ULTRASONOGRAPHIC FINDINGS**

- Mild gastritis with possible microulceration could be present, and if so, is consistent with irritation secondary to dietary indiscretion or intolerance, infection (bacterial, viral, other), parasitic or protozoal disease, toxin, other metabolic disease such as pancreatitis, other. Microulceration cannot be ruled out. However, given the lack of reported gastrointestinal signs in this patient, normal variant cannot be ruled out.
- **Hyperechoic hepatomegaly** - This appearance is non-specific and most consistent with a benign steroid (endocrine) or vacuolar hepatopathy or reactive or idiopathic hepatopathy. Inflammatory and/or infiltrative disease (such as round cell neoplasia) are also possible, but considered less likely.
- **Pancreatic age-related remodeling** – Mild irregularities are consistent with benign age-related change. Low-grade smoldering chronic pancreatitis cannot be ruled out and should be suspected in the face of appropriate clinical signs.
- Small urinary bladder cystoliths and bilateral non-obstructive dystrophic mineralization in the kidneys.

## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Given this patient's mild anemia and mild gastric wall changes, empirical deworming with a 5-day course of Panacur is recommended and is reportedly being completed. Other therapeutic considerations could include a course of antacid such as Omeprazole or similar with monitoring of the anemia for improvement versus progression, etc. There is no other obvious ultrasonographic explanation for this patient's mild anemia. Therefore, if the anemia progresses, next steps may need to include recheck CBC with path review, potential recheck imaging to look for possible emerging chronic disease, or even bone marrow cytology. However, given the mild nature of the anemia at this time, other than empirical antacid therapy, further intervention isn't necessary unless the anemia progresses.





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.

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