



**PATIENT**

Duplo Morrison

**SPECIES**

Canine

**BREED**

Boxer

**SEX**

M

**AGE**

8 years

**WEIGHT**

30 kg

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Goeres

**HOSPITAL NAME**

Kelowna Veterinary  
Hospital

**REFERRING VET**

Dr. Goeres

**INVOICE**

17300

**DATE**

7/19/23

**PRESENTING CLINICAL SIGNS**

Initially presented to pDVM July 10 for 3-4 days of inappetence and several days of diarrhea. Mild fever, BW unremarkable. mild purulent discharge from penis, so started treatment for possible prostatitis with metro 250mg/tab 1.5 tabs PO q 12 hrs for 7 days and baytril 150mg: 1.5 tab PO q 24 hrs for 14 days. 7/12 presented to ER for continued poor appetite and vomiting.

Rads performed and suspicious for ileus and gastroenteritis. Treated supportively: LRS SQ fluids 900mL Cerenia 1mg/kg IV: 3.2mL Baytril 10mg/kg: 6.3mL IM once Sulcrate 5mL TID q 5 d PO Mirtazapine 20mg/mL: 1.5mL x 2 doses ( 1st dose in clinic) to SID - BID to stimulate appetite Gastro canned + fortiflora Returned to ER 24 hours later due to leaking profuse green diarrhea.

Admitted to hospital and started on IV fluids: 1. Cerenia - 1mg/kg IV SID 2. Pantoprazole 1mg/kg IV BID 3. Buprenorphine(0.3mg/ml) - 0.008mg/kg IV TID 4. Metronidazole 10mg/kg BID IV 5. Ondansetron 0.3 mg/kg IV once 6. Baytril 10mg/kg IM once @ 10am, then SID IV 7. Mirtazapine 20mg/mL: 1.5mL given @10am July 12th PO once Discharged on Drontal Plus - one dose July 13 and one dose in 2 weeks Metronidazole 375 mg PO BID x 5days Gastro LF or chicken and rice x 7days fortiflora 1 pack SID x 5 days Omeprazole 30mg PO SID x 3 days

Was doing a bit better at home, no diarrhea but also no appetite. Returned to ER 7/16, no more diagnostics performed, administered and dispensed metoclopramide 0.5mg PO q8hrs. Recommended AUS or CT. Abnormal PE/Chem/CBC/UA Results:Observed to regurgitate water once. otherwise NAF

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 cm 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 was noted.

The prostate was mildly enlarged in size with intact, symmetrical capsule contour. The margins of the gland were intact and able to be differentiated from the surrounding tissue. The prostatic parenchyma was mildly echogenic to heteroechoic without parenchymal mineralization. The prostate measured 3.2 cm diameter.

No evidence of pathology in the area of the aortic trifurcation.

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 5.6 cm in length. The right kidney measured 6.5 cm in length.

**Adrenal Glands**

The bilateral adrenal glands were overtly normal in size, position, and shape, although indistinctly visualized. The left adrenal gland subjectively measured 0.52 cm width at the caudal pole and the right adrenal gland subjectively measured 0.51 cm width at the caudal pole.



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**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.

**Liver/ Gallbladder**

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. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal.

**Gastrointestinal**

The stomach presented intact, sonographically normal wall layering. The stomach contained a moderate amount of retained anechoic fluid and mild echogenic mucus extending into the pyloric outflow. Overt evidence of mechanical pyloric outflow obstruction or visualized gastric foreign material was not obvious. The pylorus wall width measured 0.35 cm.

The small intestine presented generalized intact wall layering and maintained 1:3 muscularis/mucosa ratio with segmental, variable intestinal ileus exhibited by mild to moderate segmental intestinal distention with retained fluid present. Concurrent segmental empty small intestine was also present to the level of the colon.

Overtly normal visualized colon wall layers were present with generalized non-formed to liquid fecal matter throughout the colon.

**Pancreas**

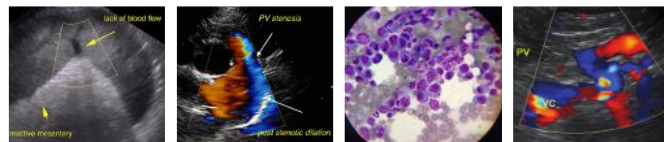
The parenchyma of the left limb, body, and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease were evident.

**Free Abdomen**

No overt or significant omental lymphadenopathy or evidence of peritoneal effusion were noted. No omental masses were present.

**ULTRASONOGRAPHIC FINDINGS**

- Moderate retained gastric fluid / hypomotile stomach
- Intact small bowel wall with segmental, variably intestinal ileus, concurrent segmental empty small bowel
- Generalized non-formed fecal matter throughout the colon
- Mild benign prostatic hyperplasia, prostatitis considered less likely



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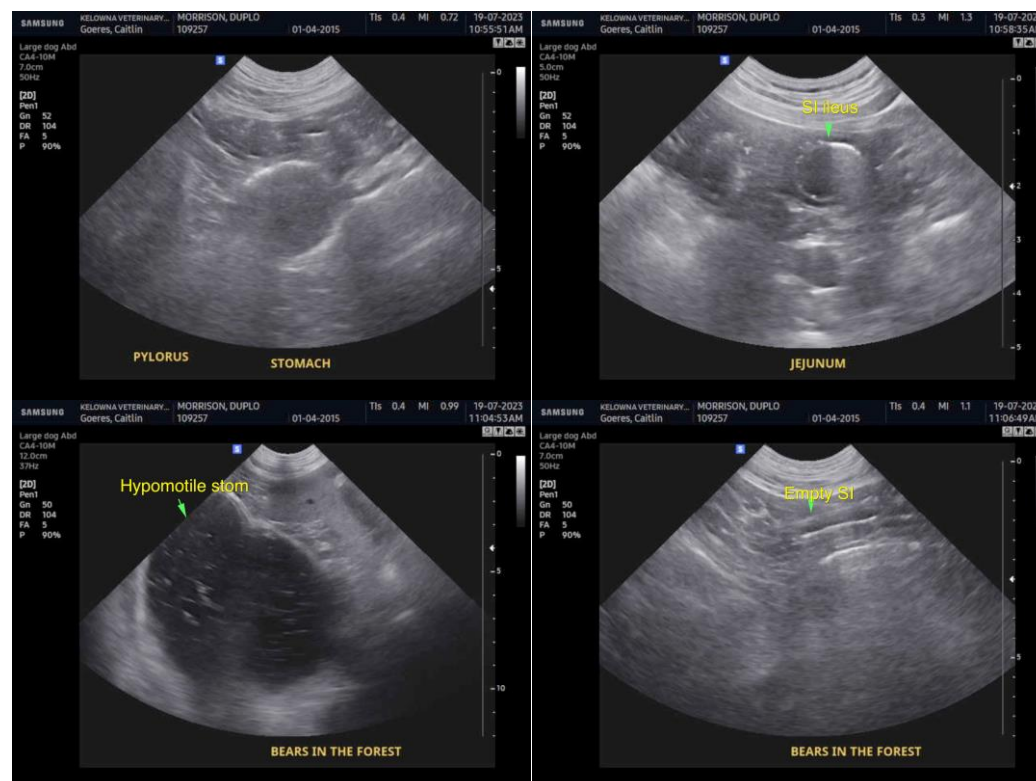
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## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The gastrointestinal presentation is nonspecific yet may suggest inflammatory gastrointestinal criteria, dietary intolerance / food hypersensitivity, dysbiosis, infectious disease, enterotoxic insult, inflammatory bowel disease, occult intestinal neoplasia, occult parasitism, occult Addison's Disease, and low-grade pancreatitis which may present as sonographically normal are all potentials.

Definitive gastrointestinal obstruction or foreign body was not obvious. However, given the segmental intestinal ileus combined with concurrent segmental empty small bowel, the possibility of non-visualized partial or mechanical intestinal obstruction cannot be definitively excluded.

Further assessment may include fresh fecal analysis, a GI panel to include PLI/TLI/Cobalamin/Folate, as well as resting cortisol level to assess for occult disease as contributing factors. Continued supportive care with assessment of clinical response and sonographic reassessment in 24-48 hours is recommended. If persistent gastric and segmental intestinal ileus and/or progressive gastrointestinal signs despite empirical therapy, laparotomy with gross inspection of the gastrointestinal tract / colon and with gastrointestinal biopsies (considered essential) should be considered.





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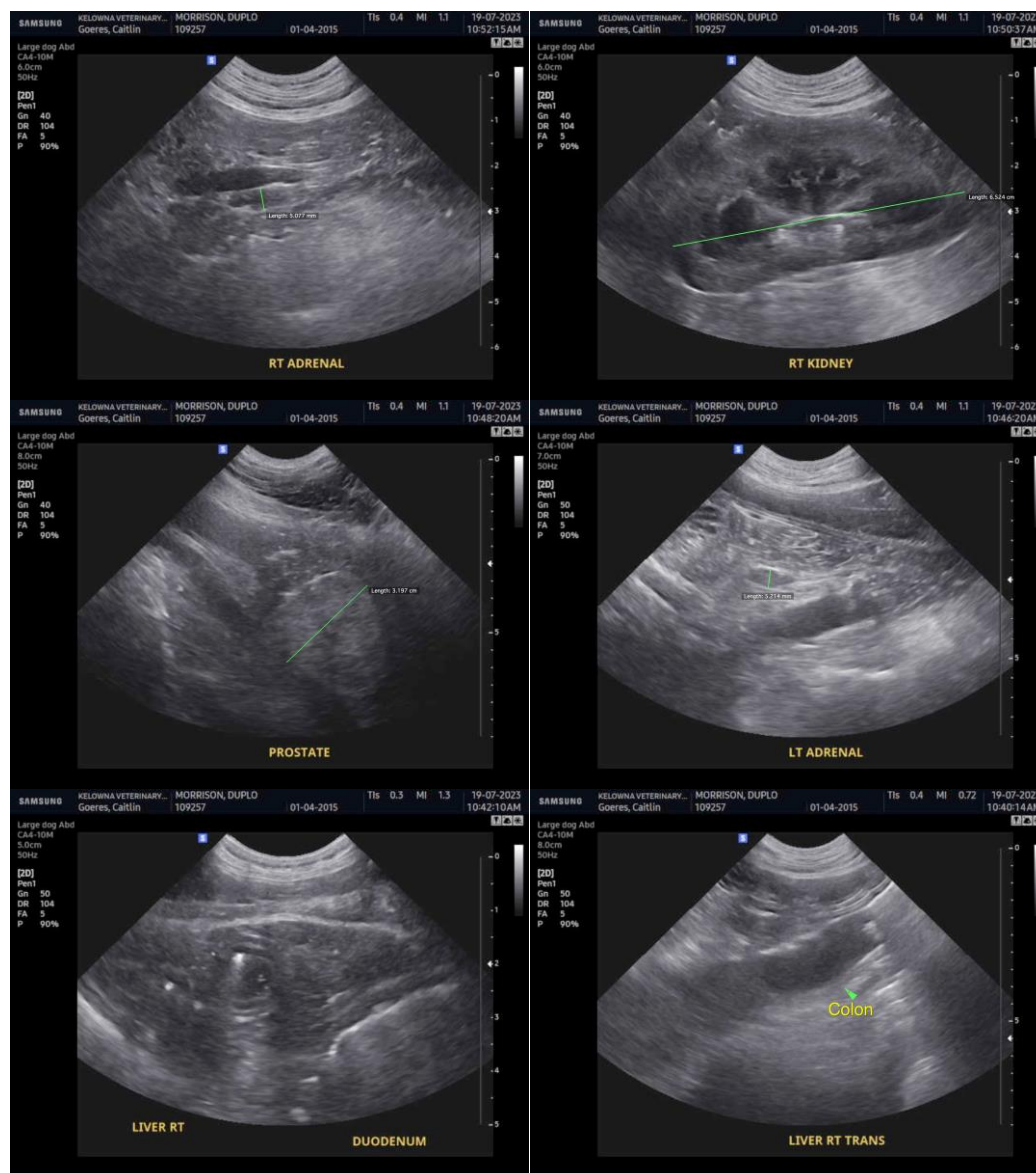
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

**R. McKenzie Daniel, DVM, DABVP (Canine/Feline Practice)**

[info@sonopath.com](mailto:info@sonopath.com)