



**PATIENT**

Jaxx Lawlor - Angel

**SPECIES**

Canine

**BREED**

Collie Shep X

**SEX**

M/N

**AGE**

1 years

**WEIGHT**

23 kg

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Belan

**HOSPITAL NAME**

Healthy Paws Fwd  
VC

**REFERRING VET**

Dr. Hen Boisen

**INVOICE**

14517

**DATE**

8/4/22

**PRESENTING CLINICAL SIGNS**

Long history of diarrhea and vomition . Has had multiple diagnostics and is not a discriminatory eater Was on Purina DR food now on Beef and rice.

Abnormal PE/Chem/CBC/UA Results: CBC and Chem normal. Chronic enteropathy panel increased TLI Increased dysbiosis index of 7.8 measuring measuring 7 common GI bact Dewormed monthly. Giardia and coccidia positive in March. Now negative. Cortisol normal.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 4.0 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 residual prostate was symmetrically normal in size with uniform parenchyma and slight coarse echotexture measuring 0.85 cm in diameter.

The area of the aortic trifurcation was free of pathology.

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 6.7 cm in length. The right kidney measured 5.7 cm in length.

**Adrenal Glands**

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.45 cm width at the caudal pole and 0.36 cm width at the cranial pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.44 cm width at the caudal pole and 0.34 cm width at the cranial pole.

**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.



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**Gastrointestinal**

The stomach presented intact and sonographically unremarkable wall layering. The stomach contained a mild amount of potentially retained nonshadowing ingesta / chyme. No evidence of pyloric mural pathology or obstruction to pyloric outflow. The gastric body wall width measured 0.39 cm.

The small intestine presented intact yet generalized mildly prominent wall layering owing to propensity for mildly prominent generalized small intestinal mucosa. The duodenum wall measured 0.44 cm width. The jejunum wall measured 0.33 cm width. No overt evidence of loss of intestinal wall layering or other structural pathologies such as an obvious intussusception.

The colon exhibited sonographically unremarkable generalized wall layering. The colon contained generalized soft to non-formed fecal matter consistent with reported diarrhea.

**Pancreas**

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

**Free Abdomen**

Intermittent mesenteric lymph 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 lymph node measured 0.93 cm diameter. No evidence of peritoneal free fluid was noted.

**ULTRASONOGRAPHIC FINDINGS**

- Mild gastric ingesta / chyme
- Intact yet generalized subjective mild prominent small bowel walls
- Structurally normal colon containing semi-formed to nonformed fecal matter
- Intermittent subjectively benign / reactive mesenteric lymph nodes

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The gastrointestinal presentation, although potential for a patient variant, is suggestive of underlying inflammatory enteropathy. General considerations in patients exhibiting recurrent to chronic gastrointestinal signs may include dietary intolerance / food allergy, dysbiosis, occult parasitism even with negative fecal testing (perhaps considered less likely given history of recurrent deworming), inflammatory bowel disease, low-grade to chronic pancreatitis, which may present as sonographically normal, or less likely infiltrative gastrointestinal neoplasia.

Novel protein or hydrolyzed diet trial with potential long-term dietary therapy is recommended +/- another round of empirical deworming, i.e., Panacur 50 mg/kg PO SID for at least 5 consecutive days. The increased TLI and increased dysbiosis index may suggest both upper and lower intestinal disease. Antibiotic trial, specifically Tylosin if diarrhea pattern is more consistent with small bowel diarrhea, may prove beneficial. Full ACTH stimulation test is recommended if resting cortisol level is <2.0. Upper and lower endoscopic intestinal biopsies may be required for a definitive diagnosis.



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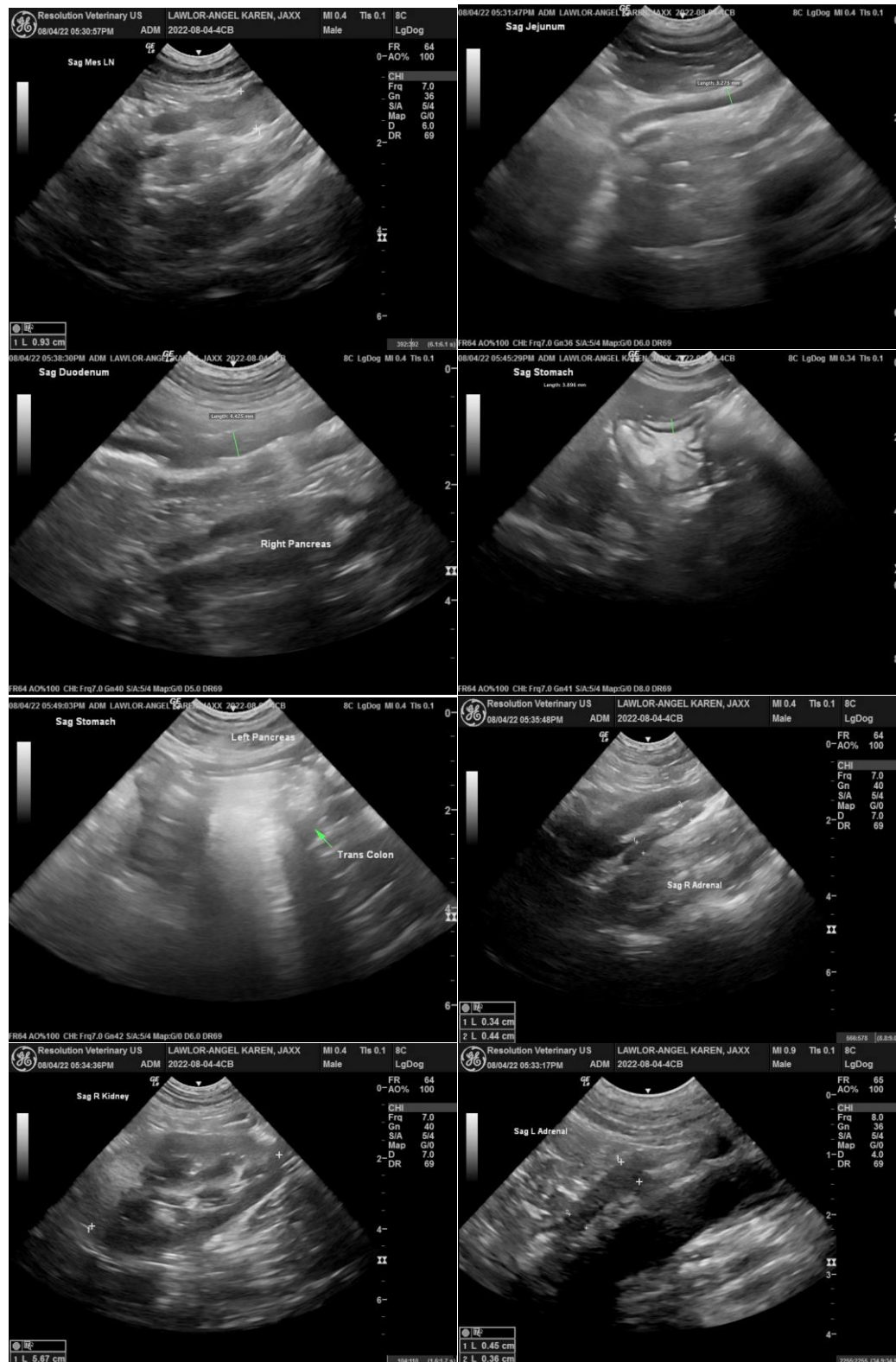
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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