



**PATIENT**

Zendo Engstrom

**SPECIES**

Canine

**BREED**

German Shepherd  
Mix

**SEX**

MN

**AGE**

4 years

**WEIGHT**

71.8 lbs

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Jenna Walsh, CVT

**HOSPITAL NAME**

Pleasant Hill AH

**REFERRING VET**

Dr. Larsen

**INVOICE**

12281

**DATE**

9/22/21

**PRESENTING CLINICAL SIGNS**

Chronic loose stool and AM inappetance and vomiting (prior to breakfast) Anxious dog  
Abnormal PE/Chem/CBC/UA Results: High TLI Normal cobalamine/folate

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

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 was noted.

The area of the residual prostate was free of pathology.

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 7.0 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 0.43 cm width at the caudal pole and 0.49 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 0.39 cm width at the caudal pole and 0.47 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.



<b>PATIENT</b>	<b><i>Gastrointestinal</i></b>
Zendo Engstrom	The stomach presented mild wall thickening secondary to mild echogenic mucosa hypertrophy. Intact wall layering was maintained and distinct. The stomach was primarily empty with luminal gas and minor retained chyme. The gastric body wall width measured 0.60 cm.
<b>SPECIES</b>	
Canine	The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction, or foreign material. The jejunum wall width measured 0.37 cm.
<b>BREED</b>	
German Shepherd Mix	Normal visible colon wall layers were present with subjective semi-formed to soft feces in lumen.
<b>SEX</b>	<b><i>Pancreas</i></b>
MN	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.
<b>AGE</b>	
4 years	<b><i>Free Abdomen</i></b>
<b>WEIGHT</b>	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). No effusion was noted.
71.8 lbs	
<b>INTERPRETED BY</b>	<b>ULTRASONOGRAPHIC FINDINGS</b>
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	<b><i>Primary Findings</i></b>
<b>IMAGING PERFORMED BY</b>	<ul style="list-style-type: none"> <li>• Mild gastritis</li> <li>• Chronic enteropathy</li> <li>• Associated intermittent reactive / benign mesenteric lymph nodes</li> </ul>
Jenna Walsh, CVT	<b><u>INTERPRETATION OF THE FINDINGS &amp; FURTHER RECOMMENDATIONS</u></b>
<b>HOSPITAL NAME</b>	No overt evidence of significant gastrointestinal or abdominal visceral pathology. However, the patient's history in combination with elevated TLI is suggestive of chronic enteropathy. Chronic IBD, dysbiosis are suspected. Fresh fecal analysis to rule out parasitic ova / Giardia, if not recently done, is recommended.
Pleasant Hill AH	
<b>REFERRING VET</b>	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 (Proviale 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.
Dr. Larsen	
<b>INVOICE</b>	Late-night feeding may prove beneficial, given the AM vomiting.
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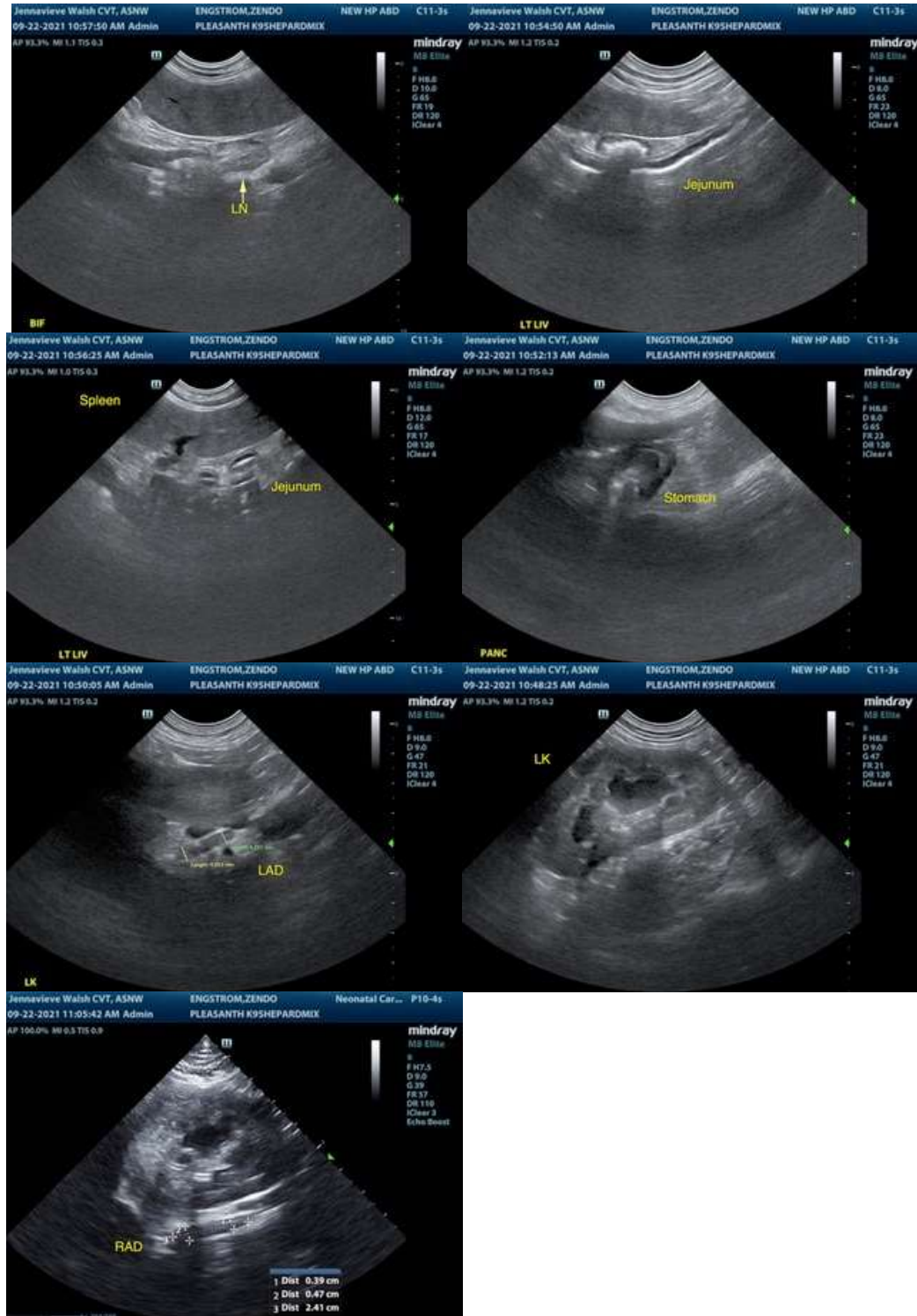
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**The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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.

**R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)**  
**info@SonoPath.com**