

**PATIENT**

Zoe Marsh

**PRESENTING CLINICAL SIGNS**

**SPECIES**

Canine

Vital Sign MM1 Weight 62.4 pounds BodyScor e9 4 - Ideal - 4 Temp 99.7 Pulse 120 Resp 30 CRT <2 sec Dental 3 - Moderate Pain 1 - No Visible Pain Alert QAR Muc Memb Pink/Healthy PAWS Request Form: Chief Concern / Provisional Diagnosis: ~Unintentional weight loss over past 4 months (6 pounds) Relevant Medical History and Physical Exam findings: ~ weight loss Recent Diagnostics: Relevant Laboratory Results / Abnormalities: ~ hypoalbuminemia 2.5 (2.7-3.9) neutropenia 2.92 (2.94-12.67K)

**BREED**

Golden Retriever

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

**SEX**

Spayed Female

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

**AGE**

10 Years 4 Months

The left kidney has a normal shape and size (6.96 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**WEIGHT**

62.4 Pounds

The right kidney has a normal shape and size (6.55 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.61 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.48 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

**IMAGING PERFORMED BY**

Loetitia Saint-Jacques, RVT

**Spleen**

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

**HOSPITAL NAME**

MountainView AH

**Liver**

The liver is normal/borderline small in size, with normal echogenicity and smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

**REFERRING VET**

Dr. Sarah Kalivoda

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.

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**Gastrointestinal**

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

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12/22/21



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The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Duodenum wall measured 0.34 cm. Jejunum wall measured 0.28 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

**Pancreas**

The pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

**Free Abdomen**

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There are occasional prominent mesenteric lymph nodes at 0.73 cm and 0.92 cm. The omentum is generally of normal echogenicity.

**Other**

A brief view of the heart was submitted. No significant pericardial effusion was seen.

**PRIMARY FINDINGS**

- Mildly thickened small intestine with mild duodenal fluid distention – The mild small intestinal wall changes may be a normal variant in this patient or could be consistent with an inflammatory process (e.g., inflammatory bowel disease).
- Prominent mesenteric lymph nodes – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

**SECONDARY FINDINGS**

- Questionable small liver – This could be normal in this individual. Recommend a liver function test.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

No large focal lesions were observed in regards to the GI tract, kidneys or liver. Consider the following recommendations for further evaluation of the low albumin reported:

- Consider common causes of hypoalbuminemia including protein losing nephropathy, enteropathy, or liver dysfunction.
- Recommend a liver function test.
- Recommend urinalysis +/- urine culture and a urine protein/creatinine ratio.
- Recommend a GI panel to Texas A&M for a qualitative PLI, TLI, cobalamin and folate to further evaluate for possible small intestinal disease.
- If liver function and urine protein levels are relatively normal, then this is likely due to underlying GI disease. No focal lesions were observed, so it is likely that biopsies would be necessary to differentiate between the primary differentials of IBD, lymphangiectasia, and underlying neoplasia.

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- Recommend 3-view thoracic radiographs to look for concurrent intrathoracic disease.

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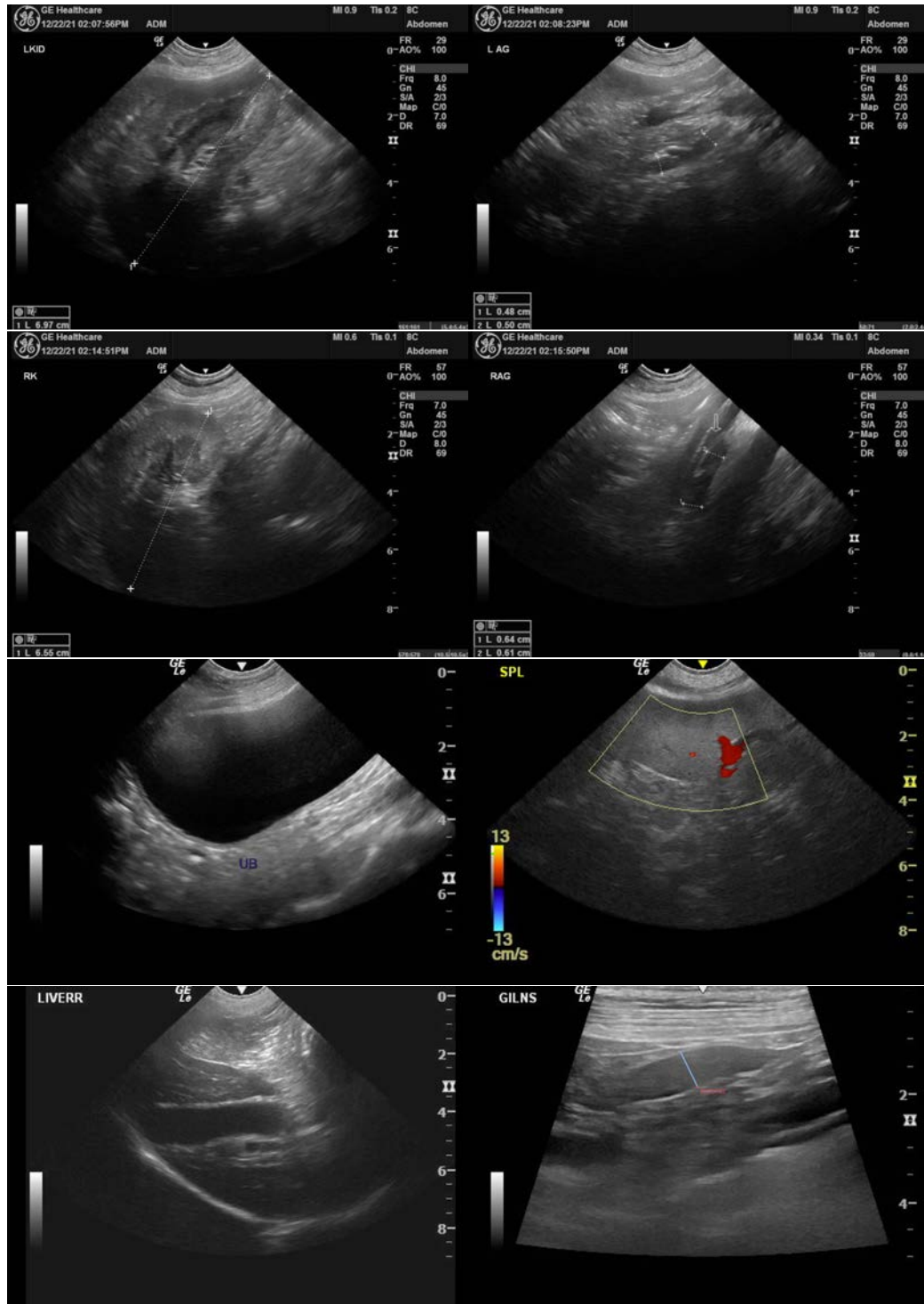
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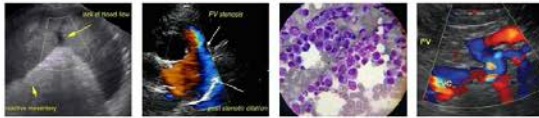
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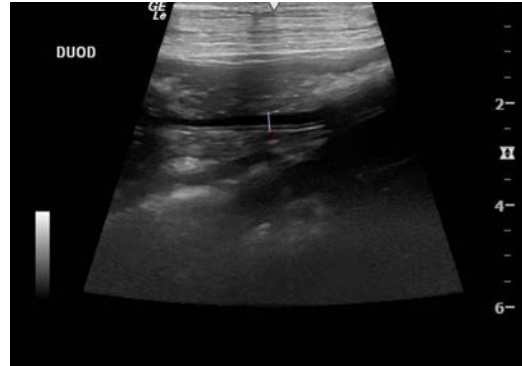
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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