



**PATIENT**

Mozart Morton

**SPECIES**

Canine

**BREED**

Shih Tzu

**SEX**

Neutered Male

**AGE**

13.5 years

**WEIGHT**

11.56 lbs

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Trae Cutchin

**HOSPITAL NAME**

Friendship Springs  
VC

**REFERRING VET**

Dr. Trae Cutchin

**INVOICE**

12924

**DATE**

12/30/21

**PRESENTING CLINICAL SIGNS**

Intermittant mild vomiting and coughing of a few days duration.

Abnormal PE/Chem/CBC/UA Results: Comments by SonoPath radiologist : Significant thickening of the gastric wall with indicated calcifications and prominent pyloric region. The suspected thickening of the gastric wall is highly suspicious for severe gastritis. Lympho-plasmocytic and-histiocytic inflammation is possible as well as gastric ulceration. Neoplasia cannot be fully excluded. The calcifications and the distension would match with the latter (R/O foreign material/adenocarcinoma/lymphoma).

**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.

No evidence of pathology was noted in the area of the residual prostate.

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 was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild to moderate loss of corticomedullary symmetry and definition expected for the age of the patient. Pinpoint medullary mineral was present in both kidneys. A small cortical cyst was noted in the right kidney. No evidence of pelvic dilation was present. The left kidney measured 3.7 cm in length. The right kidney measured 3.8 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 0.66 cm width at the caudal pole and 0.47 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 0.49 cm width at the caudal pole.

**Spleen**

The spleen was overall normal in size and contour and primarily maintained a finely textured homogeneous parenchyma. A solitary, subtly expansive, hypoechoic to nonhomogeneous parenchymal nodule was present in the medial splenic parenchyma. The potential for subtle medial capsule distortion associated with the spleen is possible yet without evidence of parenchymal escape, measuring 0.69 cm in diameter.

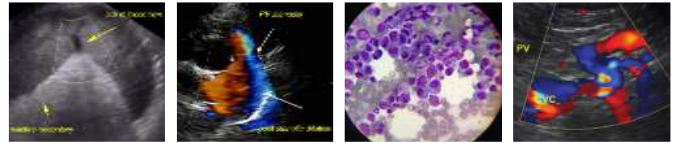
**Liver/ Gallbladder**

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 mild,



<b>PATIENT</b>	nondependent yet nonorganized gallbladder debris. No evidence of gallbladder or peripheral Inflammation was noted. The cystic and common bile ducts were normal.
Mozart Morton	
<b>SPECIES</b>	<b><i>Gastrointestinal</i></b>
Canine	The stomach exhibited generalized yet variable mural thickening most prominent in the area of the mid gastric body antrum and pylorus with evidence of mucosal hyperplasia. Discernable wall layering appeared to be intact throughout the stomach yet less discernable in the area of the pylorus. Potential for mineral either within the wall or potentially along the luminal surface was present in the area of the antrum and pylorus. Moderate retained primarily anechoic fluid and mild chyme was present in the stomach. The ventral gastric body wall width measured 0.40 cm. The pylorus wall thickening was variable, measuring 0.52 cm up to 0.78 cm. No overt evidence of gastric foreign material was noted, yet given some degree of artifact secondary to concurrent luminal gas, technically, the potential for a minor amount of foreign material in the stomach cannot be definitively excluded.
<b>BREED</b>	
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<b>AGE</b>	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 duodenum wall width measured 0.38 cm. The jejunum wall width measured 0.28 cm.
13.5 years	
<b>WEIGHT</b>	Normal visible colon wall layers were present with apparent formed feces in lumen.
11.56 lbs	
<b>INTERPRETED BY</b>	<b><i>Pancreas</i></b>
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	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>IMAGING PERFORMED BY</b>	<b><i>Free Abdomen</i></b>
Dr. Trae Cutchin	Subtle evidence of perigastric reactive mesentery was noted. No evidence of peritoneal effusion or overt lymphadenopathy was present.
<b>HOSPITAL NAME</b>	<b>ULTRASONOGRAPHIC FINDINGS</b>
Friendship Springs VC	<b><i>Primary Findings</i></b>
<b>REFERRING VET</b>	<ul style="list-style-type: none"> <li>• Generalized gastric thickening more prominent in the area of the gastric antrum / pylorus, potential for mural vs. luminal mineralization with concurrent gastric hypomotility</li> <li>• Sonographically unremarkable small bowel</li> </ul>
Dr. Trae Cutchin	<b><i>Secondary Findings</i></b>
<b>INVOICE</b>	<ul style="list-style-type: none"> <li>• Chronic renal changes with pinpoint medullary mineral and right kidney cortical cyst</li> <li>• Nonspecific splenic nodule</li> <li>• Mild gallbladder debris (non-mucocele)</li> </ul>
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12/30/21	<b><u>INTERPRETATION OF THE FINDINGS &amp; FURTHER RECOMMENDATIONS</u></b>

Considerations for the stomach may include chronic inflammation or mucosal hyperplasia, infectious gastropathy (helicobacter), or neoplasia, all of which may potentially present in a similar sonographic manner.



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Given the relatively intact and discernable wall layering, neoplasia may be considered a less likely differential diagnosis, yet is certainly possible. Definitive diagnosis would require endoscopic gastric biopsies which are encouraged if possible. Empirically, some or all of the following protocol may be considered.

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Potential etiologies for the splenic nodules may include benign processes such as nodular hyperplasia, extramedullary hematopoiesis, hematoma, infection, infarction, or neoplasia. Ultrasound guided FNA of the nodule using 25-gauge needle and assuming normal coagulation parameters may be considered. Otherwise, sonographic monitoring of the splenic nodules for any changes in size or appearance with initial recheck in 3-4 weeks would be a more conservative approach.

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A clinical trial of **Zithromax (Dogs: 5-10 mg/kg p.o. q24h. May increase dosing interval to q48h after 3-5 days of treatment), Metronidazole (10-20 mg/kg p.o. b.i.d.), Pepcid (0.5-1 mg/kg s.i.d.) and Sucralfate (0.5-2 g/dog PO) or Omeprazole (1 mg/kg p.o. s.i.d.)** over the next 3 weeks along with a **novel-protein or hydrolyzed diet** with slurry feeding b.i.d./t.i.d. over the next 2-4 days and then increase to canned diet bid. Dry food should be avoided over the next 4 weeks. A recheck sonogram to assess GI improvement or progression would be ideal in 4 weeks.

**AGE**

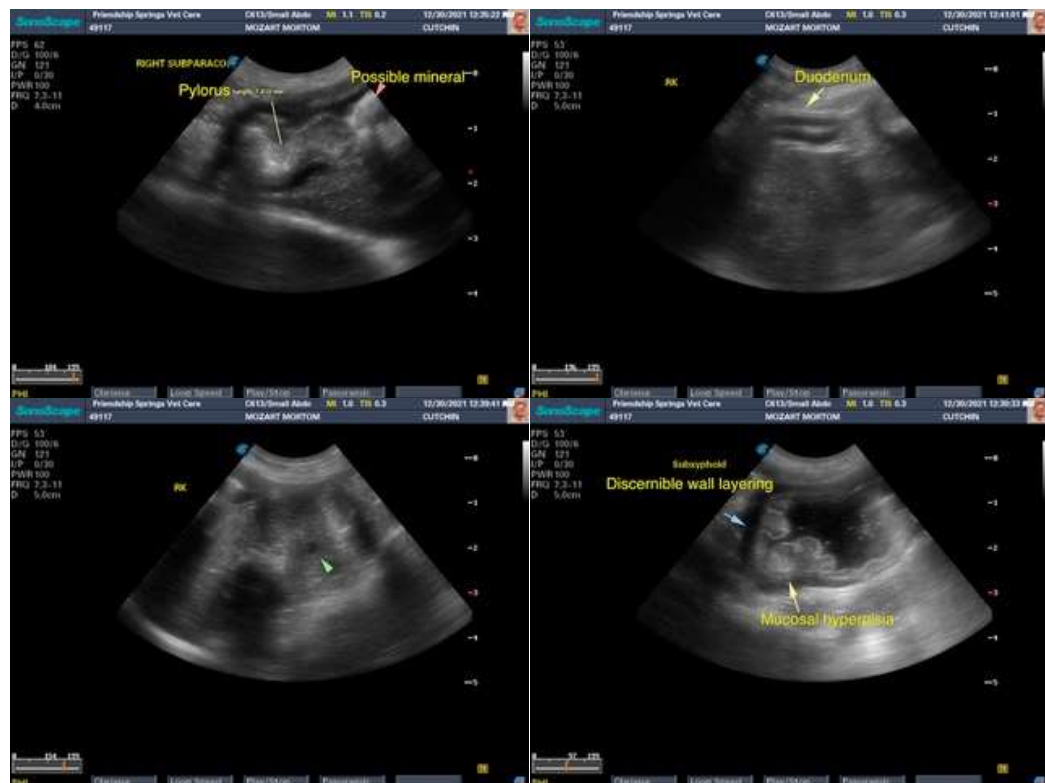
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not



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**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**