



**PATIENT**

Abo Zhang

**SPECIES**

Canine

**BREED**

Schnauzer

**SEX**

Male/Neutered

**AGE**

10

**WEIGHT**

17

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Sharkaway

**HOSPITAL NAME**

Kew Gardens AH

**REFERRING VET**

Dr. Sharkaway

**INVOICE**

17118

**DATE**

8/31/22

**PRESENTING CLINICAL SIGNS**

VOMITING 5 TO 7 TIMES A WEEK FOR 3-4 MONTHS WITH PAUSE PERIODS OF 2 WEEKS WHEN PREVIOUS VET START CERENIA AND METRONIDAZOLE, THEN RELAPSE -DIARRHEA ON AND OFF - WEIGHT LOSS -GOOD APETITE

Abnormal PE/Chem/CBC/UA Results: BACK IN APRIL CPLI HAD- POSITIVE

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder, trigone and cystourethral junction exhibited normal thickness and tone. Primarily anechoic urine was present in the lumen. Minor nondependent hyperechoic sediment was present, which may indicate cellular debris, crystalline debris or possible mucus. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic mural changes were noted.

No overt pathology 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 loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 4.4 cm in length. The right kidney measured 4.5 cm in length.

**Adrenal Glands**

The left adrenal gland was indistinctly visualized, subjectively measuring 0.45 cm in width.

The right adrenal gland was not definitively visualized.

**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 mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild to benign parenchymal remodeling. 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**



|  |  |
|--|--|
| <b>PATIENT</b>   | The stomach presented intact and sonographically unremarkable wall layering with a normal wall layer ratio. The lumen of the stomach contained a mild amount of retained nonshadowing ingesta/chyme. The ventral gastric body wall measured 0.29 cm. No evidence of mechanical pyloric outflow obstruction.  |
| Abo Zhang  |  |
| <b>SPECIES</b>   | The small intestine exhibited primarily intact wall layering with maintained 1:3 muscularis/mucosa ratio. A segment of the small intestine, subjectively within the mid abdomen, exhibited moderate wall thickening, exhibiting indistinct loss of wall layer detail and associated mild metabolic to paralytic ileus.   |
| Canine   |  |
| <b>BREED</b>   | The segment of mid abdominal intestine measured approximately 4-5 cm in diameter with wall width up to 0.6 cm. By comparison, normal appearing small intestine measured 0.37 cm in wall width. No overt evidence of mechanical obstructive pattern or obvious foreign material.  |
| Schnauzer  |  |
| <b>SEX</b>   | Normal visible colon wall layers were present with semi-formed to soft fecal matter, consistent with potential diarrhea.   |
| Male/Neutered  |  |
| <b>AGE</b>   | <b><i>Pancreas</i></b>   |
| 10   | The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.   |
| <b>WEIGHT</b>  | <b><i>Free Abdomen</i></b>   |
| 17   | No omental masses were noted. No evidence of overt lymphadenopathy. No evidence of peritoneal free fluid.  |
| <b>INTERPRETED BY</b>                                    | <b>ULTRASONOGRAPHIC FINDINGS</b>   |
| R. McKenzie Daniel,<br>DVM, DABVP<br>(Canine and Feline) | <b><i>Primary Findings</i></b>   |
| <b>IMAGING PERFORMED BY</b>                              | <ul style="list-style-type: none"> <li>• Sonographically unremarkable stomach with mild retained chyme/fluid</li> <li>• Segmentally thickened midabdominal small bowel, exhibiting indistinct/loss of wall layer detail</li> <li>• Sonographically unremarkable colon</li> </ul>   |
| Dr. Sharkaway  | <b><i>Secondary Findings</i></b>   |
| <b>HOSPITAL NAME</b>                                     | <ul style="list-style-type: none"> <li>• Mild chronic renal changes</li> <li>• Minor hepatic parenchymal remodeling- benign</li> </ul>   |
| Kew Gardens AH   |  |
| <b>REFERRING VET</b>                                     | <b><u>INTERPRETATION OF THE FINDINGS &amp; FURTHER RECOMMENDATIONS</u></b>   |
| Dr. Sharkaway  | The primary finding is the segmental abnormally thickened intestine, exhibiting indistinct loss of discernable wall layer detail. Considerations may include segmental inflammatory versus infiltrative process without overt evidence of concurrent obstruction. Intestinal biopsies are required for a definitive diagnosis. Subjectively, the segment of intestine, which is suspected to most likely involve the midabdominal jejunum, appears to be amendable to surgical resection. If surgical biopsies are elected, additional biopsies elsewhere in the intestinal tract would be considered essential to assess for more generalized intestinal disease. A GI panel to include PLI/TLI/Cobalamin/Folate is recommended. Three view chest radiographs are recommended prior to any potential surgical considerations. |
| <b>INVOICE</b>   | Empirically, a hydrolyzed diet trial with potential long term dietary therapy, prophylactic deworming (i.e., Panacur 50 mg/kg PO SID for at least 5 consecutive days), high colony count (such as Provable)  |
| 17118  |  |
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and as needed gastrointestinal support with monitoring of the abnormal intestine for evidence of progression would be a more conservative approach.

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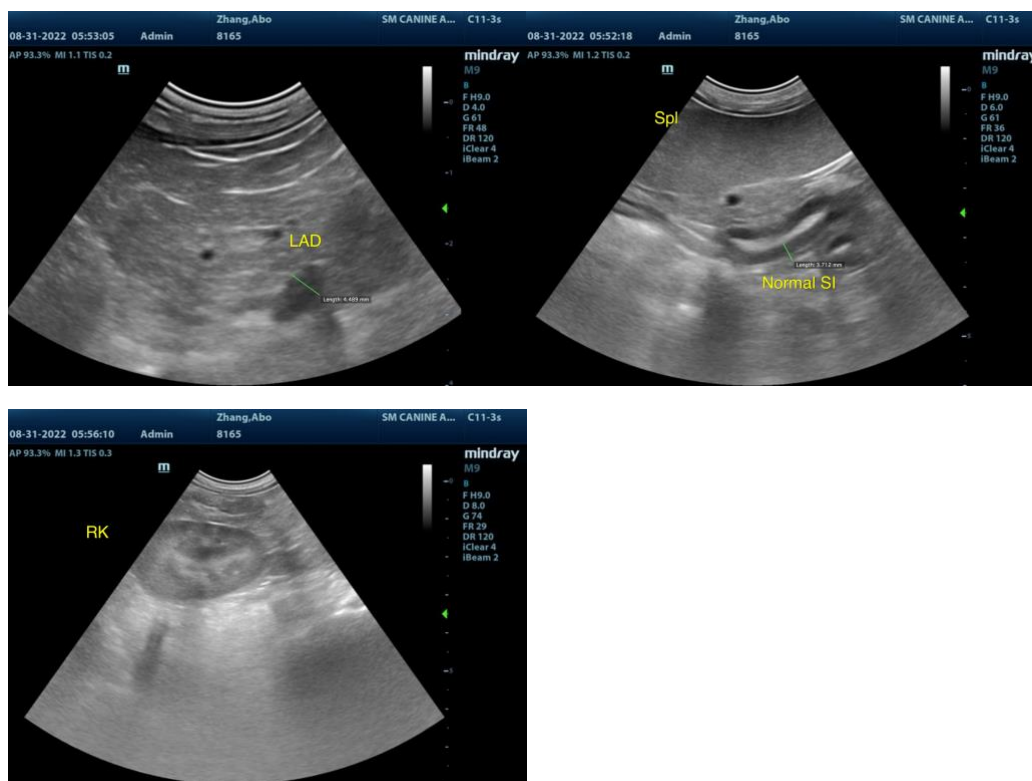
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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