



**PATIENT PRESENTING CLINICAL SIGNS**

Daisy Swanger History: Recurrent diarrhea and vomiting Metronidazole, Cerenia

**SPECIES**

Canine

**BREED**

Chihuahua

**SEX**

Spayed female

**AGE**

14 years

**WEIGHT**

2.6 pounds

Abnormal PE/Chem/CBC/UA Results: BUN 45 CREAT 1.8 GGT 16 ALP 212 ALT 86 GLU 63 ALB 2.9, CBC wnl

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder presented mildly subnormal in size owing to lack of urine distension, full evaluation of the urinary bladder walls was somewhat limited and was without evidence of significant mural pathology. The trigone, cystourethral junction, and visible pelvic urethra to a depth of 1 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 area of the aortic trifurcation was free of pathology.

Normal size and margination was present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some mildly increased echogenicity and mild loss of corticomedullary symmetry and definition expected for the age of the patient. Areas of nonobstructive medullary mineral to small renoliths present in both kidneys. No evidence of pelvic dilation was present. The left kidney measured 2.5 cm in length. The right kidney measured 2.7 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 0.43 cm width at the caudal pole and 0.27 cm width at the cranial pole. The right adrenal gland was indistinctly visualized yet was without overt pathology subjectively measuring 0.3 cm at the caudal 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 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 mild nondependent mildly hyperechoic to organized luminal debris. No evidence of peripheral gallbladder inflammation was observed. The cystic and common bile ducts were normal.

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Rebekah Jakum, CVT ARDMS/RVT

**HOSPITAL NAME**

Stanglein VC

**REFERRING VET**

Dr. DiNello

**INVOICE**

10298ag

**DATE**

04/04/2022



**PATIENT** *Gastrointestinal*

Daisy Swanger The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction, or foreign material. The gastric body wall measured 0.25 cm in width.

**SPECIES**

Canine The small intestine presented intact yet mildly prominent wall layering diffusely without evidence of loss of intestinal wall layering, intestinal masses or mechanical/metabolic ileus. The duodenum wall measured 0.30 cm in width. The jejunum wall measured 0.22 cm in width.

**BREED**

Chihuahua Normal visible colon wall layers were present with apparent semi formed to soft feces in lumen.

**SEX**

**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.

Spayed female

**Free Abdomen**

**AGE**

Subtle evidence of peri intestinal reactive mesentery was observed, with no overt lymphadenopathy or peritoneal effusion.

14 years

**ULTRASONOGRAPHIC FINDINGS**

**WEIGHT**

- Bilateral mild chronic renal changes with nonobstructive medullary mineral/renoliths.
- Hepatic parenchymal remodeling-subjectively benign.
- Nondependent to mildly organized gallbladder debris-possible very early gallbladder mucocele.
- Intact yet subjective mild prominent GI wall layering.
- Unremarkable colon containing semi formed to soft feces.

2.6 pounds

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 DVM, DABVP  
 (Canine and Feline)

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**IMAGING**

**PERFORMED BY**

Rebekah Jakum, CVT  
 ARDMS/RVT

The GI mural changes are suggestive of inflammatory enteropathy yet were relatively mild. At times the GI signs exhibited by a patient do not always correlate sonographically with GI presentation. In pets with chronic to recurrent GI signs, dietary indiscretion/food intolerance, IBD, dysbiosis, mild to chronic pancreatitis which may present sonographically normal or intestinal neoplasia (less likely in this case) could be possible. A GI panel to include PLI/TLI/Cobalamin/Folate is recommended as well as fresh fecal analysis to rule out parasitic ova/giardia. 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 (Provable 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.

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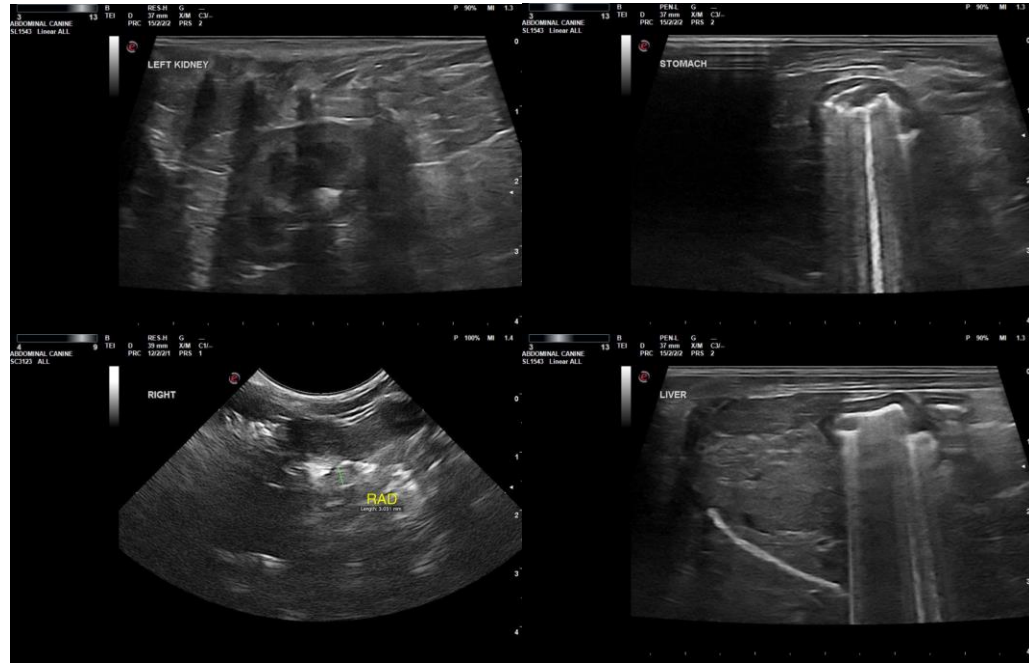
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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