



**PATIENT**

Crystal Lopez

**SPECIES**

Canine

**BREED**

Chihuahua

**SEX**

F/S

**AGE**

14 years

**WEIGHT**

5.9

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Reyes

**HOSPITAL NAME**

Mobile Vet  
Ultrasound

**REFERRING VET**

Dr. Fine

**INVOICE**

15838

**DATE**

1/13/23

**PRESENTING CLINICAL SIGNS**

Decreased appetite and elevated liver enzymes.

Abnormal PE/Chem/CBC/UA Results: ALP: 4499 BUN: 66.4 Gluc: 46 CBC: WBC: 13.9 HCT: 36,1 Plt: 565  
Not leptospirosis vaccinated

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 1.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths, sediment or calculi. 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 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 loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation or pyelectasia was present. Potential discrete areas of medullary mineralization were noted. The left kidney measured 3.0 cm in length. The right kidney measured 3.0 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 0.42 cm width at the caudal pole. The right adrenal gland was indistinctly visualized without overt pathology subjectively measuring 0.38 cm width 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 exhibited normal to possible borderline subnormal size, yet subjective normal hepatic vascular volume. No masses or nodules were noted. 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 mildly distended in size containing anechoic content with mild, nondependent to particulate, mildly echogenic debris. No evidence of gallbladder or peripheral gallbladder inflammatory criteria was noted. The cystic and common bile ducts were normal.



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**Gastrointestinal**

The stomach presented mild to moderate wall thickening secondary to mild to moderate echogenic mucosa hypertrophy. Intact wall layering was maintained and distinct. The stomach contained a mild amount of retained primarily anechoic fluid and minor echogenic chyme. No evidence of mechanical pyloric outflow obstruction was noted. The ventral gastric body wall width measured 0.40 cm. The pylorus wall width measured 0.50 cm.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with minor segmental luminal gas and no signs of mechanical / metabolic ileus, obstruction, or foreign material.

Normal visible colon wall layers were present with apparent formed feces in lumen.

**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.

**Free Abdomen**

No overt lymphadenopathy or peritoneal effusion was present.

**ULTRASONOGRAPHIC FINDINGS**

- Bilateral mild chronic renal changes
- Hepatopathy
- Mildly distended gallbladder with mild echogenic luminal debris - not consistent with mucocele criteria
- Hypomotile gastritis, sonographically unremarkable small bowel - Minor potential for early infiltrative gastric neoplasia cannot be excluded yet is considered less likely
- Heterogeneous pancreas - patient / age-related variant, possible low-grade pancreatitis

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered.

The hepatic presentation was nonspecific yet consistent with benign hepatopathy. Further assessment may include, assuming normal clotting status and using a 25-gauge needle, screening hepatic FNA cytology, as well as Leptospirosis titers / PCR. Assessment for evidence of cranial abdominal or subxiphoid discomfort on palpation, which may allude to low-grade pancreatitis, +/- Spec cPL is suggested.

Empirically, hepatosupportive medications with therapy for hypomotile gastritis +/- coverage for helicobacter and potential sonographic reassessment of the stomach if persistent inappetence, vomiting, etc., would be reasonable.



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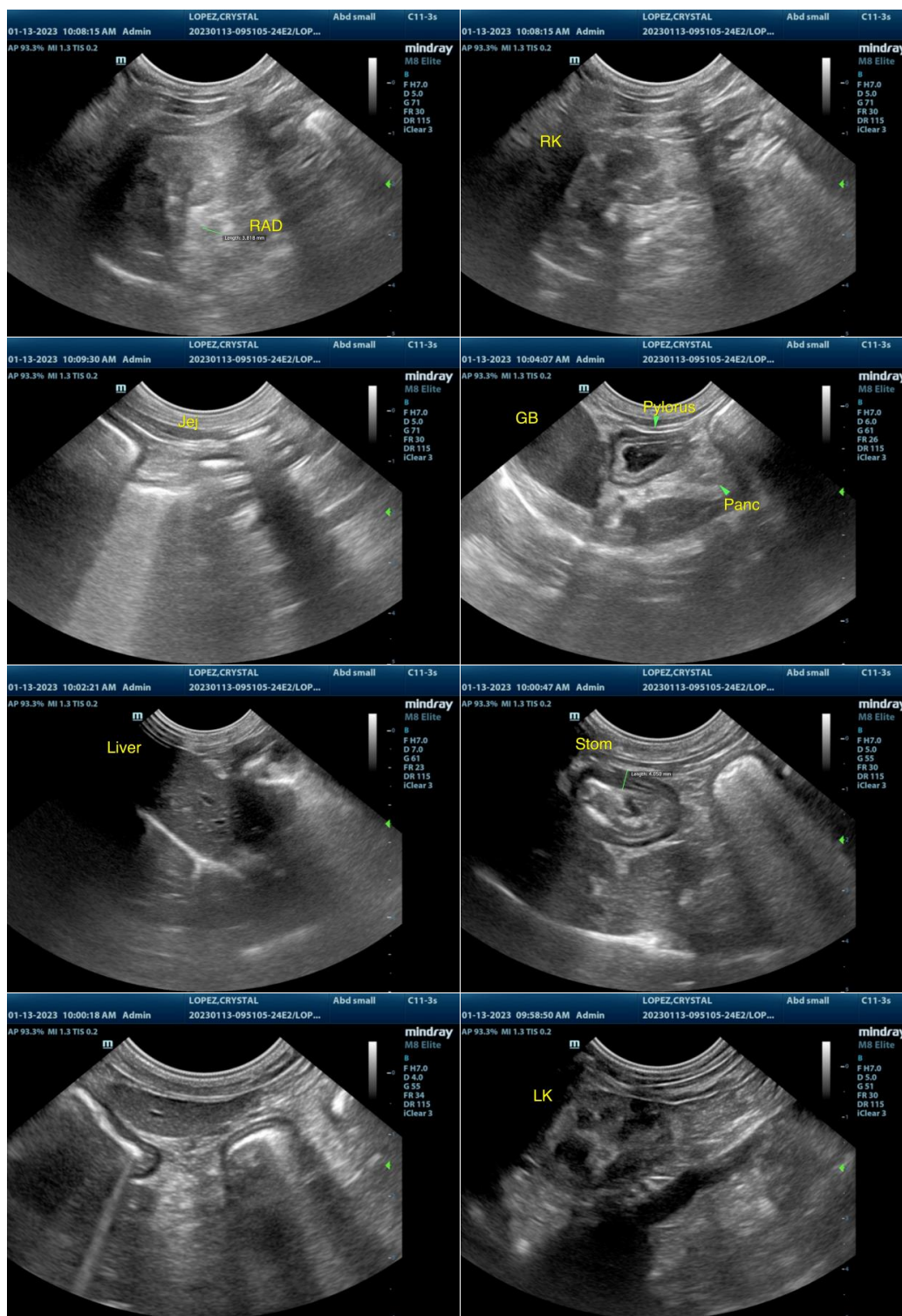
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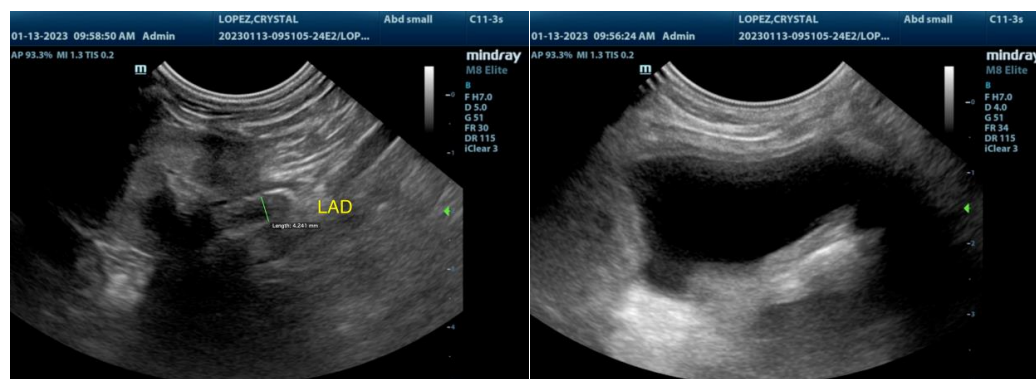
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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