



PATIENT PRESENTING CLINICAL SIGNS

Perla Rivera Patient has a history of occasional diarrhea in the last months. Liver values has been persistently elevated in the last 3 years, but no symptoms presented other than diarrhea. In 2019 a dexamethasone suppression test was performed, and results were normal.

SPECIES

Canine Abnormal PE/Chem/CBC/UA Results: Feb. 10 2022 Chem: ALT (214 U/L) & ALP (>2000 U/L) CBC: Platelets (739 K/uL)

BREED

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Maltese

Urinary System

SEX

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3.0 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 were noted. Aortic trifurcation was normal.

Spayed Female

AGE

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 was present. Focal areas of medullary mineral to small renoliths present. The left kidney measured 4.2 cm in length. The right kidney measured 4.4 cm in length.

12 years

WEIGHT

Adrenal Glands

13.5 lbs

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.72 cm width at the caudal pole and 0.56 cm width at the cranial pole.

INTERPRETED BY

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

The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.62 cm width at the caudal pole and 0.77 cm width at the cranial pole.

IMAGING PERFORMED BY

Julissa Diaz

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.

HOSPITAL NAME

Centro Veterinario del Norte

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.

REFERRING VET

Dr. Rivera

Liver

The liver presented enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion.

INVOICE

14139

The gallbladder was non distended in size with primarily anechoic content with mild debris, primarily noted along the inner luminal surface. The gallbladder was otherwise normal. The cystic duct and common bile ducts were normal without evidence of dilation. No evidence of peripheral inflammation noted.

DATE

2/28/22



PATIENT

Gastrointestinal

Perla Rivera

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.

SPECIES

Canine

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.

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

BREED

Maltese

Pancreas

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 was evident.

SEX

Spayed Female

Free Abdomen

No overt lymphadenopathy or peritoneal effusion was present.

AGE

12 years

ULTRASONOGRAPHIC FINDINGS

- Age-related kidneys with focal medullary mineral
- Hepatopathy- subjectively benign
- Mild gallbladder debris (non-mucocele)
- Overtly normal gastrointestinal tract/pancreas

WEIGHT

13.5 lbs

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Considerations for the liver may include vacuolar hepatopathy and nonobstructive cholestasis given the primarily elevated ALP with potential for primarily concurrent nonspecific inflammatory hepatopathy or hepatobiliary process given the presence of ALT and minor gallbladder debris. No overt evidence of hepatic neoplastic criteria. Further assessment may include ultrasound guided FNA of the liver using a 25-gauge needle and assuming normal clotting status. Hepatosupportive medications, including Denamarin and Ursodiol may prove beneficial. Potential for underlying endocrinopathy is considered unlikely given the lack of reported clinical signs and sonographic appearance of the bilateral adrenal glands.

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Potential considerations for the intermittent diarrhea may include mild to low-grade pancreatitis, dietary intolerance/food hypersensitivity, structurally insignificant inflammatory bowel disease, all of which may present without evidence of gastrointestinal mural changes. Further assessment may include (if persistent or recurrent diarrhea) GI panel, to include, PLI, TLI, cobalamin and folate and fresh fecal analysis to rule out ova and 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.

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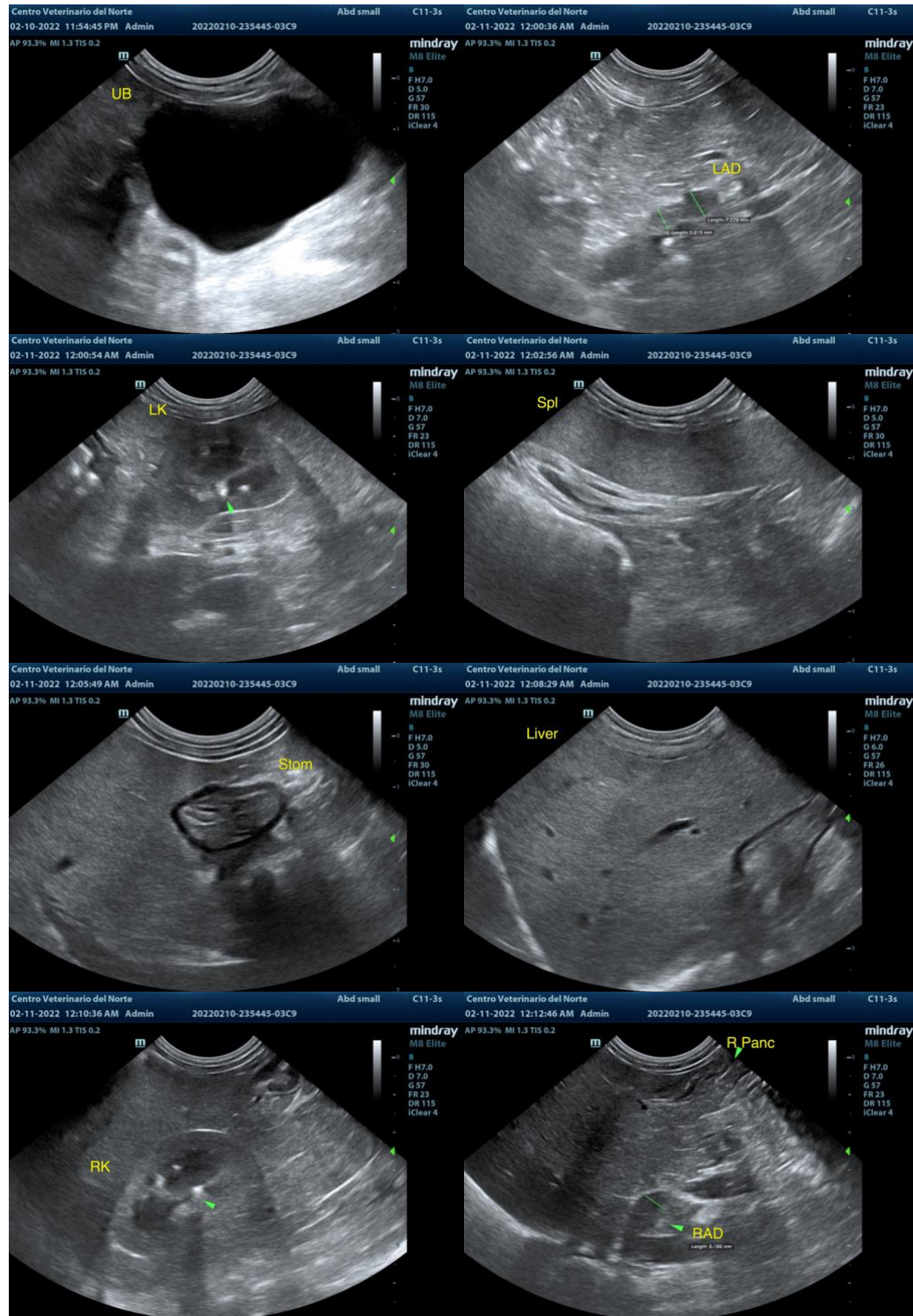
Dr. Rivera

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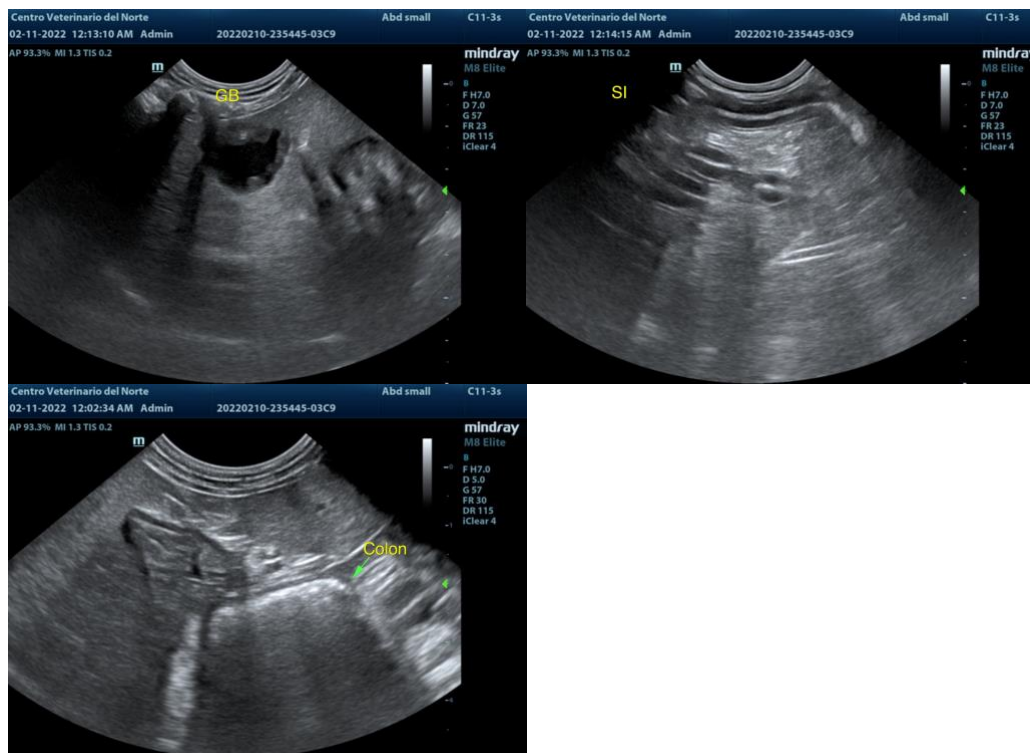
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)
info@SonoPath.com