


PATIENT PRESENTING CLINICAL SIGNS

Noa Rey

SPECIES

Canine

BREED

Shih Tzu

SEX

Spayed Female

History: Dog presented for evaluation of hematuria on November 9, 2022. At that time bladder stone was diagnosed via radiographs in addition to hepatomegaly; urinalysis reported specific gravity of 1.018, pH 8 but no bacteria, epithelial cells, casts, mucus, or crystals were observed. Labs: Urinalysis dated 11/10: Spec Grav 1.018, PHA 0.0, 1+ protein, 1+ blood, total protein >12, albumin 2.8, ALT not read, ALP 109, Previous 40 x negative. Surgery was postponed given she was not obstructed and hepatomegaly (elevated liver enzymes); further workup not pursued at the time. She was treated with diet, urinary supplementation, and anti-inflammatories. Abdominal US strongly encouraged. During the weekend of December 25th, she went to emergency clinic for recurrence of hematuria. No evidence of urolith seen then and owner wanted to reevaluate study. On December 27, 2022, she presented for reevaluation of hematuria caused most likely from urethral calculi diagnosed on 11/19. Radiographs were taken and consulted with radiologist and no signs of calculi were observed, radiologist suggested a cystitis. Patient was sent home with Clavamox 125 mg (1-tab po bid for 5 days). On January 2, 2023, owner reported that dog still has hematuria while taking antibiotics. Given the history recommended abdominal u/s because we are concerned about bladder neoplasia, pyelonephritis, etc.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
AGE

7 Years

Urinary System

The urinary bladder was normal in size and tone with overtly normal urinary bladder walls without evidence of significant inflammatory or neoplastic criteria. Anechoic urine was present in the lumen. Mild dependent to nondependent particulate sediment, which may indicate suspected cellular debris/protein, crystalline debris or mucus. The proximal urethra was overtly normal in structure and tone to a depth of 3.0 cm. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic mural changes were noted. Aortic trifurcation was normal.

WEIGHT

11.7 Pounds

INTERPRETED BY

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

No evidence of pathology in the area of the uterine remnant.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio and normal corticomedullary definition were maintained. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pyelectasia or pyelonephritis criteria. The left kidney measured 4.6 cm in length. The right kidney measured 4.7 cm in length.

IMAGING PERFORMED BY

Julissa Diaz

Adrenal Glands
HOSPITAL NAME

 Centro Veterinario del
 Norte

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.37 cm width at the caudal pole and 0.32 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 0.45 cm width at the caudal pole.

REFERRING VET

Dra. Ileana Rivera

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.

INVOICE

20359

DATE
Liver

1/5/23



PATIENT

Noa Rey

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.

SPECIES

Canine

The gallbladder was non-distended in size with primarily anechoic luminal content. The cystic and common bile ducts were normal.

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Gastrointestinal

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.

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Spayed Female

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.

AGE

7 Years

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.

WEIGHT

11.7 Pounds

Free Abdomen

No overt lymphadenopathy or peritoneal effusion was present.

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(Canine and Feline)

ULTRASONOGRAPHIC FINDINGS

- Overtly normal urinary bladder and visible proximal urethra with mild bladder sediment- no evidence of significant inflammatory or neoplastic criteria. No evidence of cystic or proximal urethral calculi.
- Normal bilateral kidneys- no evidence of pyelonephritis
- Nonspecific hepatomegaly- subjectively benign

IMAGING

PERFORMED BY

Julissa Diaz

HOSPITAL NAME

Centro Veterinario del
Norte

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of overt upper or lower urinary tract pathology. Potential for low grade cystitis, which may present sonographically normal, is possible. Recheck urine culture and sensitivity in sterile urine sample is recommended. If documented UTI, higher dose/shorter frequency antibiotic protocol, i.e., enrofloxacin or clavamox 20 mg/kg PO SID for 3-5 days may be considered if clinical concern for recurrent UTI. Further assessment of the liver may include, assuming normal clotting status, screening hepatic FNA cytology +/- leptospirosis titers/PCR if endemic to the area or if clinically indicated. If persistent hyperglobulinemia, protein electrophoresis could be considered for further clarification.

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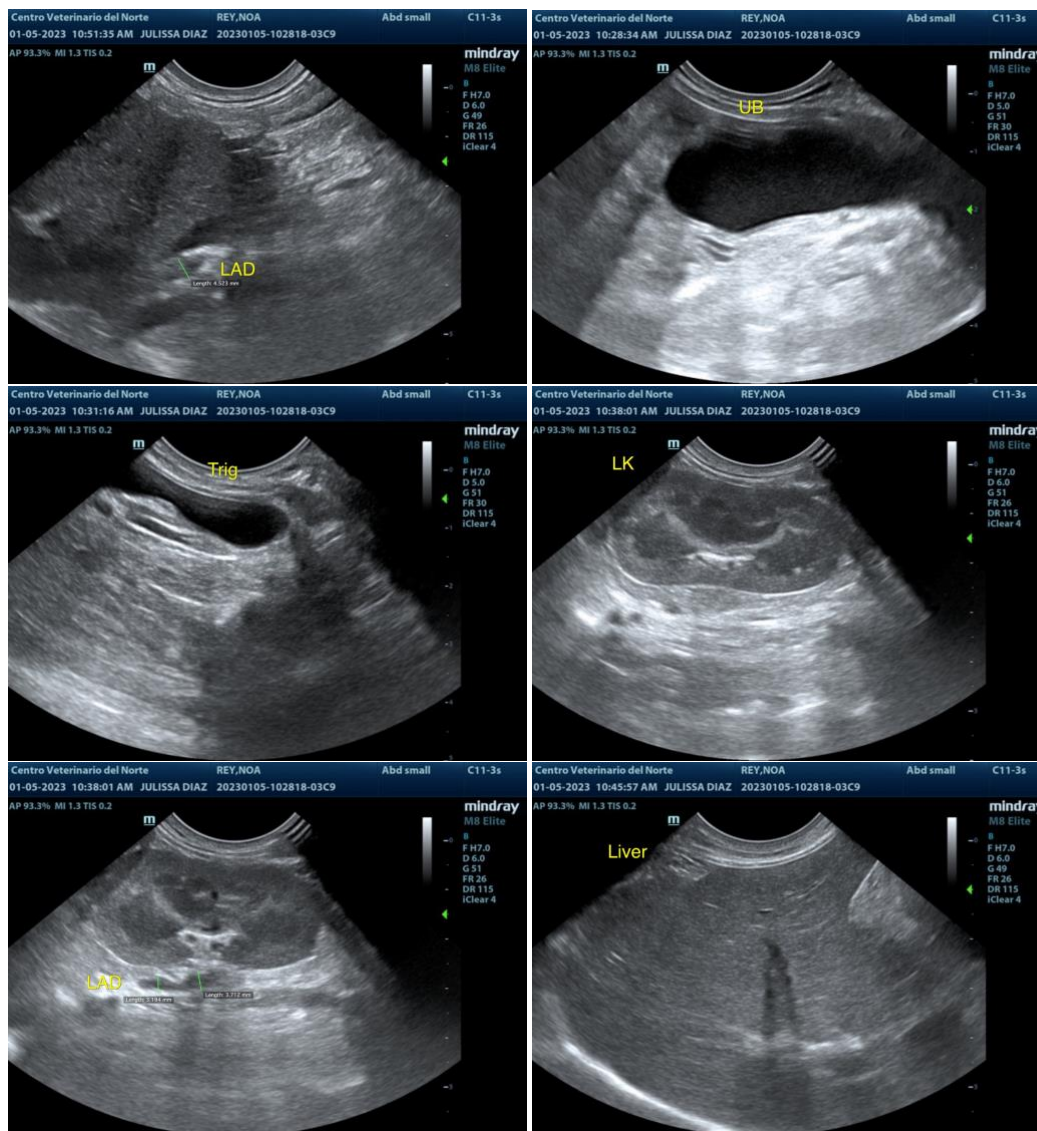
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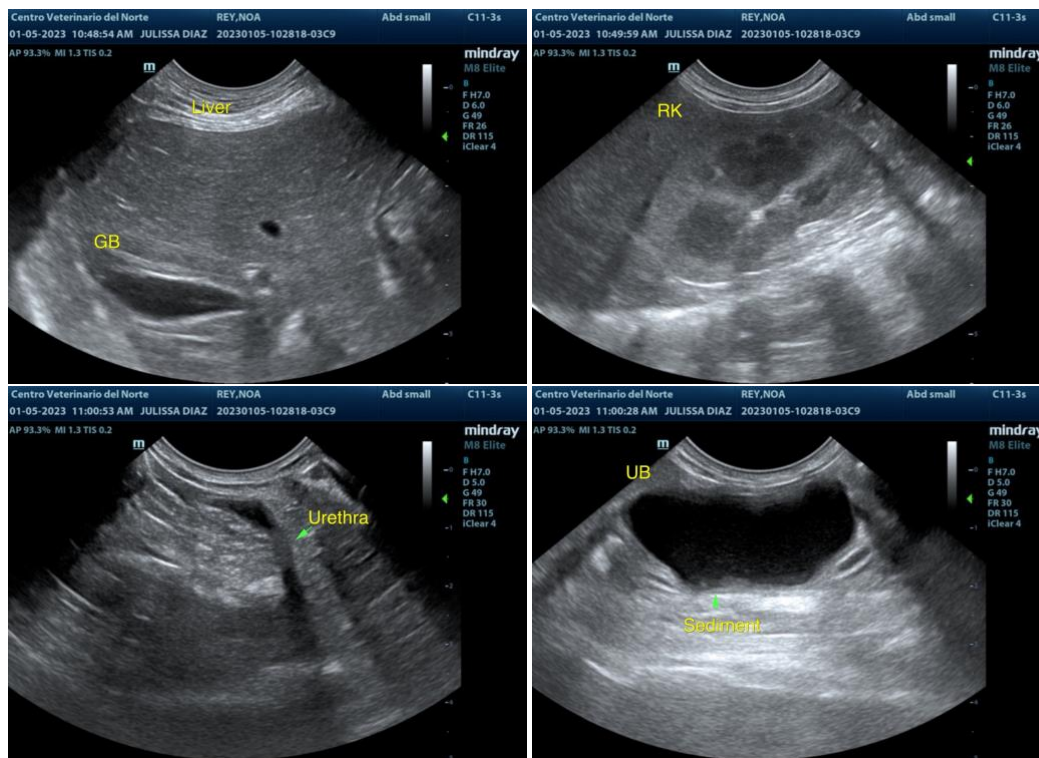
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DATE

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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)
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