



PATIENT PRESENTING CLINICAL SIGNS

Lulu Sherman History: Hematuria, stranguria, urinary incontinence
Medication: Zeniquin

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Canine

Urinary System

BREED

West Highland White Terrier

The patient initially presented moderately distended with anechoic urine and without evidence of neoplastic or inflammatory mural changes sediment or calculi. Urination during ultrasound was noted. Collapsed urinary bladder wall measured 0.46 cm. The visible proximal urethra exhibited overall normal structure and tone compared to the previous ultrasound and without evidence of progressive urethral thickening. The urethra at this time measured approximately 0.43 cm in width and was without evidence of urine retention, dilation or overt pathology.

SEX

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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 pyelectasia was present. The left kidney measured 4.4 cm in length. The right kidney measured 5.0 cm in length. Pinpoint areas of previously noted mineral present.

AGE

13 years

Adrenal Glands

WEIGHT

17 Pounds

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 1.8 cm x 0.54 cm.

The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 1.9 cm x 0.56 cm.

INTERPRETED BY

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

Spleen

IMAGING PERFORMED BY

Rebekah Jakum, CVT ARDMS/RVT

The spleen exhibited primarily finely textured parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Mild generalized parenchyma heterogeneity was present without evidence of nodular changes. 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. The parenchymal heterogeneity is likely consistent with benign changes such as extramedullary hematopoiesis or age-related remodeling with minor potential for inflammatory or neoplastic disease. Previously noted coalescing medial parenchymal myelolipomas or capsular fibrosis present, this was similar in appearance to previous ultrasound without evidence of progression.

HOSPITAL NAME

Maple Hills VH

Liver

REFERRING VET

Dr. Banzhof

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. This is a mild change.

INVOICE

13701

The gallbladder was non-distended in size with moderate static nondependent yet nonorganized variably echogenic gallbladder debris. The cystic and common bile ducts were normal.

DATE

1.31.2022

Gastrointestinal



PATIENT

Lulu Sherman

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 0.34 cm.

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. The duodenum wall measured 0.39 cm.

BREED

West Highland White Terrier

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.

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Free Abdomen

No overt lymphadenopathy or peritoneal effusion was present.

AGE

13 years

ULTRASONOGRAPHIC FINDINGS

- Overtly normal urinary bladder and visible proximal urethra
- Static mild age-related renal changes with pinpoint medullary mineral
- Mild vacuolar hepatopathy pattern- similar in appearance to previous ultrasound
- Moderate gallbladder debris (non-mucocele)- static
- Probable medial splenic myelolipomas and medial capsule fibrosis

WEIGHT

17 Pounds

INTERPRETED BY

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

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of overt or progressive visible lower urinary tract changes or pathology as an obvious cause of the hematuria, stranguria and reported urinary incontinence was noted, including no evidence of neoplastic lower urinary tract criteria. Cystoscopy is likely ideal in this patient for further assessment of the non-visualized urethra as well as assessment of the ureteral papilla for rare conditions, such as idiopathic renal hematuria or similar. Assuming normal blood pressure and if consistent incontinence, phenylpropranolamine or incurin trial may be considered.

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ARDMS/RVT

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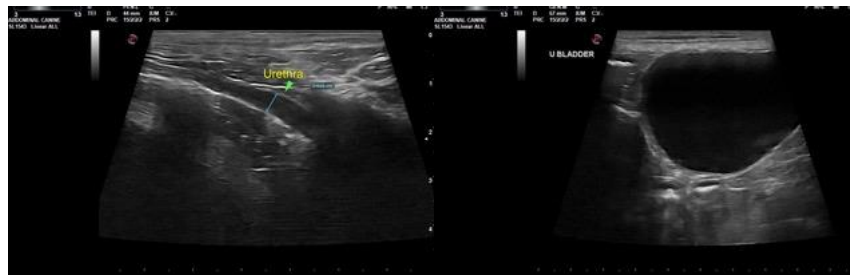
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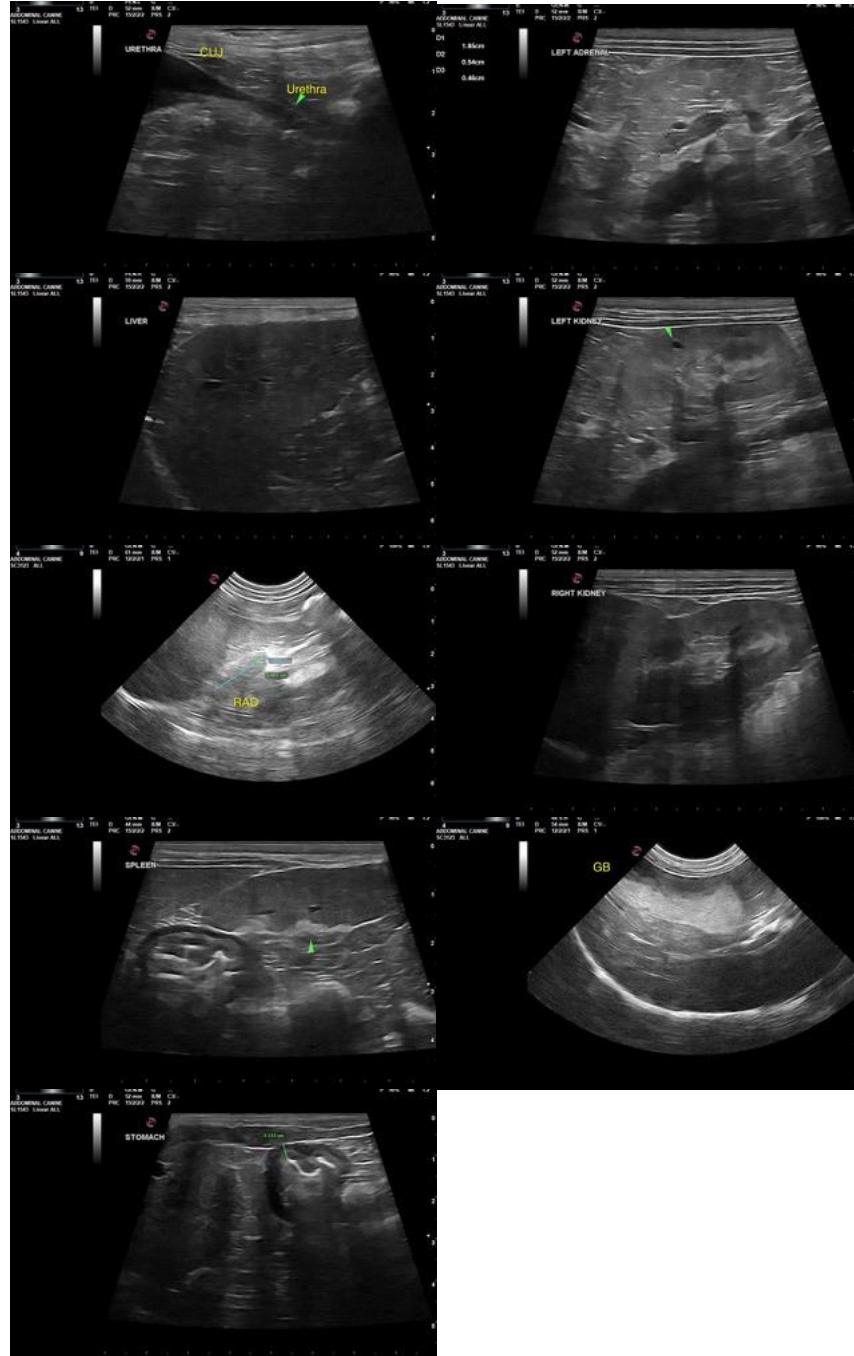
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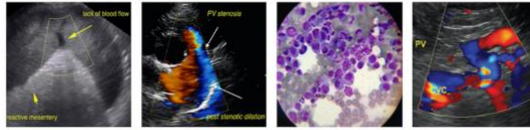
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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)



PATIENT mac.daniel@sonopath.com

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