



**PATIENT PRESENTING CLINICAL SIGNS**

History: PU/PD, urinary issues

Medication: Desmopressin .1 mg BID

Urinalysis- Specific gravity 1.005, negative protein and glucose

Canine  
 CBC- HCT 59.6

Chemistry panel- Glucose 119, Albumin 4.4, Unremarkable liver parameters, cholesterol 365, T4 2.2

Yorkie Mix **ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

**SEX**

Neutered Male  
 The bladder exhibited mild generalized distention. 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 was noted.

**AGE**

8 years  
 The residual prostate was symmetrically normal in size with uniform parenchyma and slight coarse echotexture measuring 0.7 cm in diameter.

**WEIGHT**

15 Pounds  
 The area of the aortic trifurcation was free of pathology.

**INTERPRETED BY**

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

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 or overt pyelonephritis was present. The left kidney measured 4.7 cm in length. The right kidney measured 4.5 cm in length.

**IMAGING PERFORMED BY**

Rebekah Jakum, CVT  
 ARDMS/RVT

**Adrenal Glands**

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 1.6 cm length x 0.51 cm width at the caudal pole.

**HOSPITAL NAME**

Community VP

The right adrenal gland was mildly prominent in size with subtle nonhomogeneous parenchyma, measuring 2.4 cm length x 0.74 cm width at the caudal pole. No evidence of parenchymal mineralization was noted.

**Spleen**

**REFERRING VET**

Dr. Hulshizer

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**

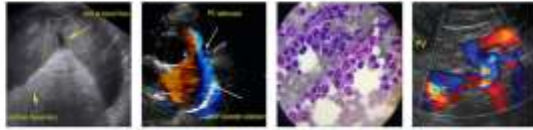
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**Liver/ Gallbladder**

**DATE**

9.22.2021

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were



**PATIENT**

Mikey Mormak

normal in appearance without signs of congestion. The gallbladder was non-distended in size with moderate nondependent to slightly inspissated gallbladder debris. Focal hypoechoic to anechoic areas noted between the luminal debris and inner luminal walls, suggestive of mucus, were present. The cystic and common bile ducts were normal.

**SPECIES**

Canine

***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.

**BREED**

Yorkie Mix

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.

**SEX**

Neutered Male

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

***Pancreas***

**AGE**

8 years

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 were evident.

***Free Abdomen***

**WEIGHT**

15 Pounds

No overt lymphadenopathy or peritoneal effusion was present.

**ULTRASONOGRAPHIC FINDINGS**

***Primary Findings***

- Mildly distended yet sonographically unremarkable urinary bladder
- Sonographically unremarkable residual prostate and visible proximal urethra
- Early mild age-related renal changes, no overt pyelonephritis
- Mildly enlarged to prominent right adrenal gland - nonspecific
- Sonographically unremarkable liver with moderate gallbladder debris - possible early mucocele

**INTERPRETED BY**

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

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Baseline renal staging including urine culture and sensitivity UPC on a sterile urine sample is suggested. Leptospirosis titer / PCR may be considered given the PU/PD or if clinically indicated.

**IMAGING PERFORMED BY**

Rebekah Jakum, CVT  
ARDMS/RVT

**HOSPITAL NAME**

Community VP

**REFERRING VET**

Dr. Hulshizer

The mildly prominent right adrenal gland is nonspecific and of unclear clinical significance. Patient variant or benign hyperplasia is possible without overt evidence of neoplastic criteria. Screening blood pressure is recommended. Screening urine cortisol: creatinine ratio +/- LDDST may be considered if clinically indicated. However, the appearance of the liver was not consistent with steroid hepatopathy.

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Ursodiol and monitoring for evidence of future cholestasis is recommended.

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For an additional charge, internal medicine consult can be utilized through Sonopath.com. You can select the internal medicine drop down at <http://spa.sonopath.com/>.



**PATIENT**

Mikey Mormak

One of the world's top internists & SonoPath associate Dr. Remo Lobetti BVSc, MMedVet, PhD, DECVIM can evaluate your case through SonoPath. <https://sonopath.com/resources/sonopath-services/internal-medicine-teleconsultation-services>

**SPECIES**

Canine

**BREED**

Yorkie Mix

**SEX**

Neutered Male

**AGE**

8 years

**WEIGHT**

15 Pounds

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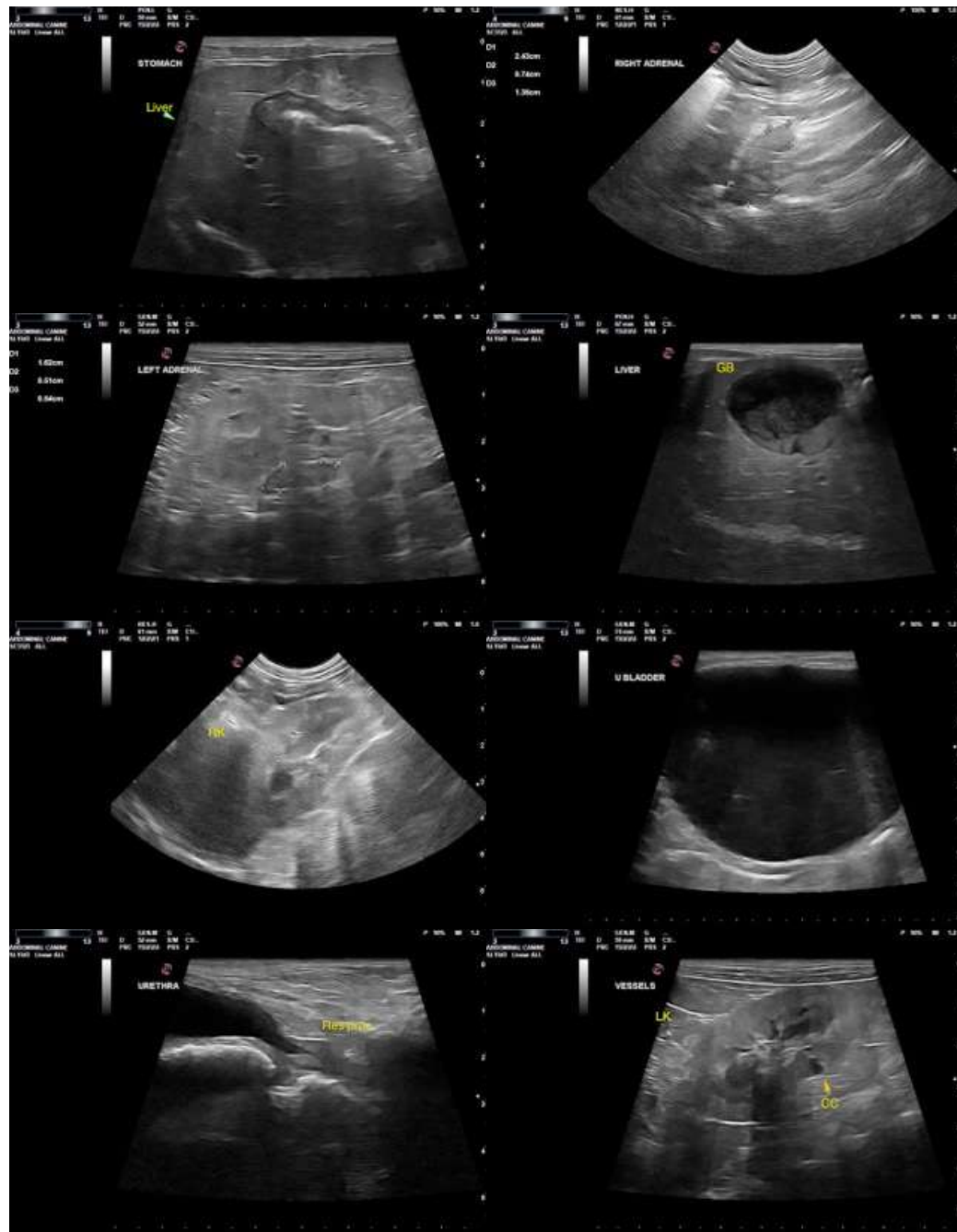
Dr. Hulshizer

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**PATIENT**

Mikey Mormak

**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.**

**SPECIES**

Canine

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.

**BREED**

Yorkie Mix

**R. McKenzie Daniel, DVM, DABVP (Canine/Feline Practice)**  
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**SEX**

Neutered Male

**AGE**

8 years

**WEIGHT**

15 Pounds

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