



<b>PATIENT</b>	<b>PRESENTING CLINICAL SIGNS</b>
Edes Borovsky	asymptomatic hematuria and either back or abdominal pain meds: thyrotabs-well controlled, gabapentin, metacam, tramadol
<b>SPECIES</b>	Abnormal PE/Chem/CBC/UA Results: U/A; ph 5.5 RBC > 20000/hpf, 1+ struvite, USG 1.040, U C&S neg see attached BW
Canine	ALP 228, ALT 195
<b>BREED</b>	<b>ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN</b>
Hungarian Puli	<b>Urinary System</b>
<b>SEX</b>	The urinary bladder was normal in size and tone with subtle ventroapical mural hypertrophy exhibiting uniform echotexture and without evidence of mineralization. No overt masses were noted. Anechoic urine was primarily present with mild nondependent particulate sediment, which may indicate cellular or crystalline debris or potential mucus. No calculi were noted. The urethra exhibited normal structure and tone to a depth of 3.0 cm.
FS	
<b>AGE</b>	The area of the aortic trifurcation was free of pathology.
12 years	
<b>WEIGHT</b>	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 4.8 cm in length. The right kidney measured 4.8 cm in length.
12.5 kg	
<b>INTERPRETED BY</b>	<b>Adrenal Glands</b>
R. McKenzie Daniel, DVM, DABVP	The bilateral adrenal glands were normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The left adrenal gland measured 1.9 cm length x 0.89 cm width in the caudal pole. The right adrenal gland measured 2.1 cm length x 0.63 cm width in the caudal pole.
<b>IMAGING PERFORMED BY</b>	<b>Spleen</b>
Kelly Reschny	The spleen exhibited primarily finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Multifocal, well-defined, symmetrical, echogenic nodules were present throughout the cranial to caudal 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 or neoplastic changes were not noted. The echogenic nodules tend to trend benign and are most consistent with benign hyperplasia or myelolipomas.
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Hawkins AH	
<b>REFERRING VET</b>	
Dr. Hawkins	
<b>INVOICE</b>	<b>Liver/ Gallbladder</b>
13193	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
<b>DATE</b>	
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**PATIENT**

Edes Borovsky

congestion. The gallbladder was non-distended in size with mild gallbladder debris. 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**

Hungarian Puli

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.

**SEX**

FS

**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 were evident.

**AGE**

12 years

**Free Abdomen**

No omental masses, lymphadenopathy or peritoneal effusion were present.

**WEIGHT**

12.5 kg

**ULTRASONOGRAPHIC FINDINGS**

**Primary Findings**

- Mild urinary bladder sediment with possible mild ventroapical cystitis
- Bilateral nonspecific mild chronic renal changes - no overt pyelonephritis
- Hepatopathy - subjectively benign
- Mild gallbladder debris (non-mucocele)

**INTERPRETED BY**

R. McKenzie Daniel,  
DVM, DABVP

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The overall liver was nonspecific yet most suggestive of benign hepatopathy. Potential considerations may include vacuolar hepatopathy and nonclinical cholestasis, given the ALP elevation with potential for nonspecific hepatitis (infectious, immune-mediated, etc.), in light of elevated ALT and presence of gallbladder debris.

**IMAGING PERFORMED BY**

Kelly Reschny

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Ultrasound-guided FNA of the liver could be considered for screening cytology. Hepatosupportive medications may prove beneficial. Screening BRAF Assay may be considered.

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Given the negative urine culture and sensitivity, conservative therapy for possible mild cystitis with an assessment of clinical response is recommended. If persistent hematuria is noted despite conservative therapy, cystoscopy may be indicated.

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Overt evidence of visceral pathology as an obvious cause of intraabdominal pain was not definitively evident.



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**SEX**

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**AGE**

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**WEIGHT**

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**IMAGING  
PERFORMED BY**

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**HOSPITAL NAME**

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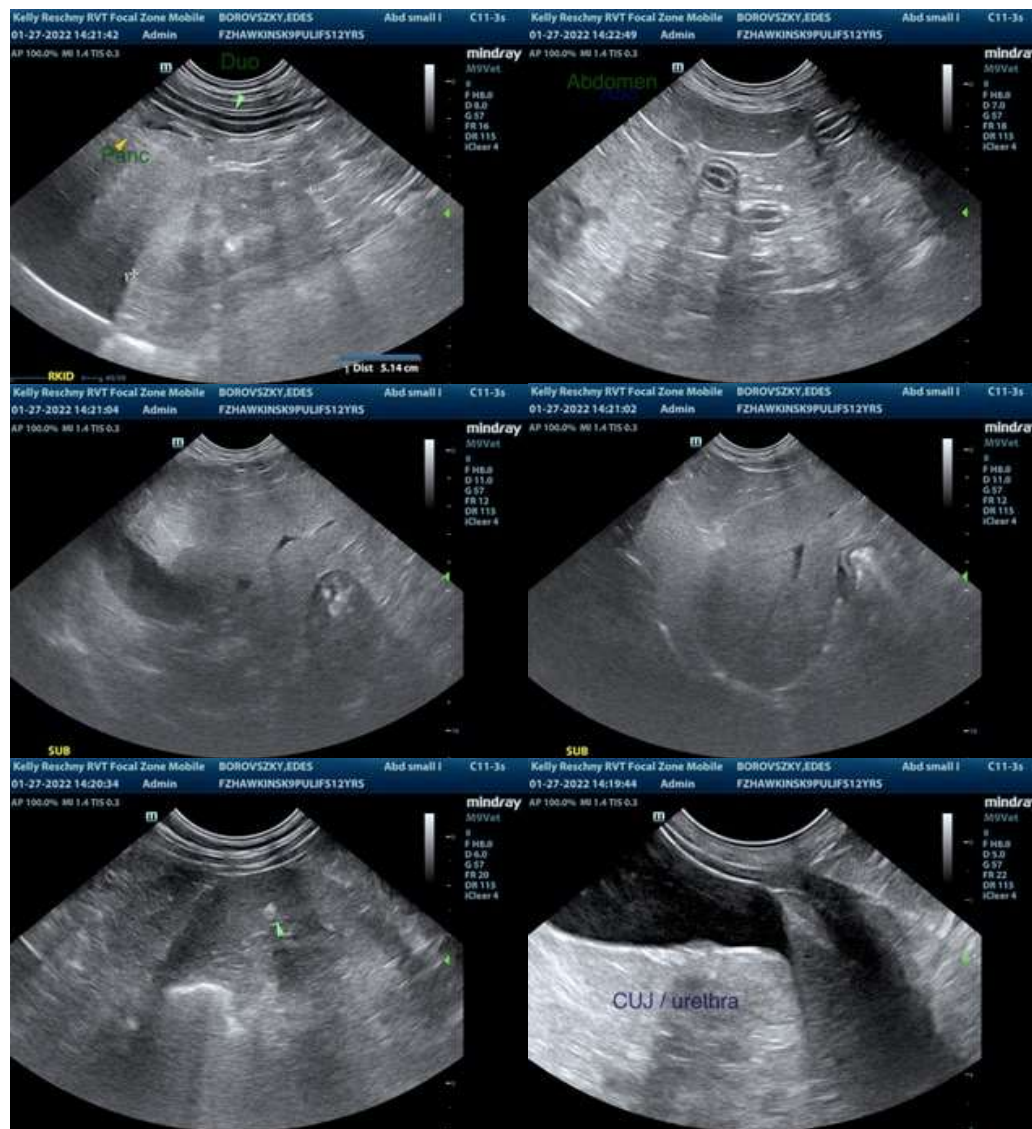
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**PATIENT**

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**SPECIES**

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**SEX**

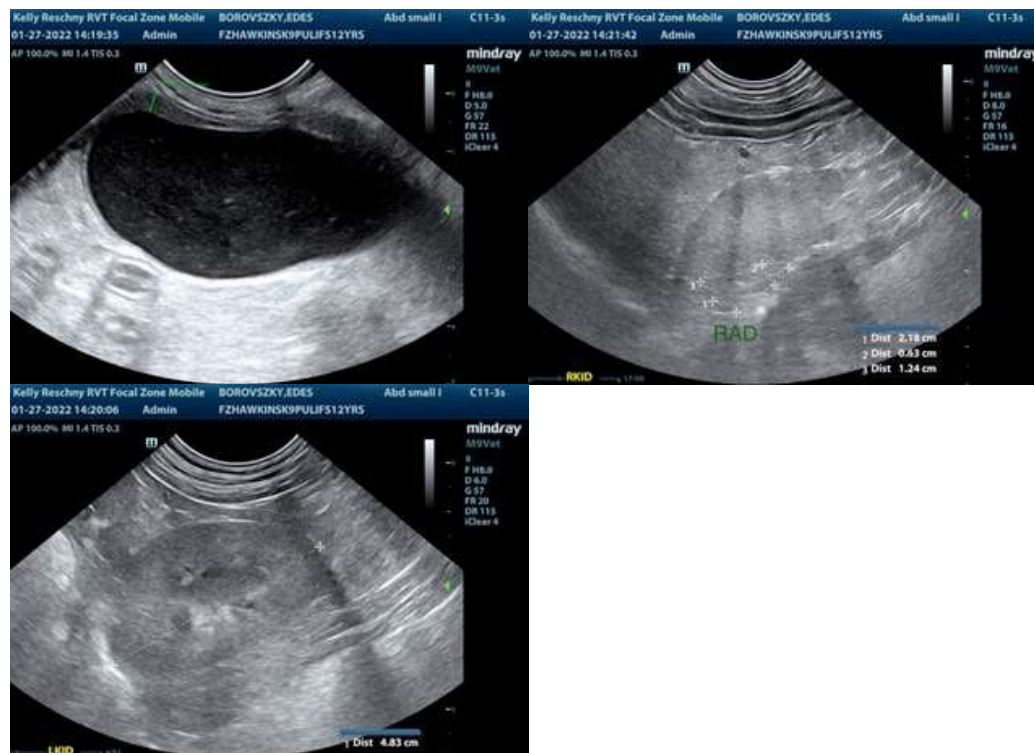
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**AGE**

12 years

**WEIGHT**

12.5 kg



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Dr. Hawkins

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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