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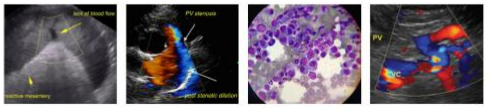

SonoPath
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1-800-838-4268 info@sonopath.com SonoPath.com

**PATIENT**

RIley Sherman

**SPECIES**

Canine

**BREED**

Jack Russell Terrier

**SEX**

FS

**AGE**

13 years

**WEIGHT**

12.9 lbs.

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Pamela Harrigan, RDCS

**HOSPITAL NAME**

Littleton AH

**REFERRING VET**

Christy Cox, DVM

**INVOICE**

13667

**DATE**

1/27/22

## PRESENTING CLINICAL SIGNS

PU/PD; weight loss. LDDS not c/w Cushing's. Urine Cortisol:Creatinine Ratio unable to r/o Cushing's

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

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.

The area of the aortic trifurcation was free of pathology.

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 loss of corticomedullary symmetry and definition expected for the age of the patient. Mild pyelectasia was present in both kidneys. The left kidney measured 4.4 cm in length. The right kidney measured 4.3 cm in length.

### *Adrenal Glands*

The left adrenal gland was enlarged with uniformly hypoechoic parenchyma was present. The left adrenal gland measured 1.0 cm width at the caudal pole and 0.75 cm width at the cranial pole.

The right adrenal gland revealed mildly non-homogeneous parenchyma. The right adrenal gland measured 0.80 cm width at the caudal pole and 0.83 cm width at the cranial pole.

No evidence of left or right adrenal parenchymal mineralization.

### *Spleen*

The spleen exhibited primarily finely textured parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Mild generalized parenchyma heterogeneity was present. 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. Focal to intermittent subtle to hyperechoic nodules, consistent with probable benign myelolipomas were present in the spleen.

### *Liver/ Gallbladder*

The liver revealed generalized enlargement with primarily uniform mild increased hepatic parenchyma echogenicity. Solitary to intermittent discreet hypoechoic intraparenchymal nodule to nodules were present, an example measured 1.3 cm in diameter. The hepatic and portal vasculature were normal in appearance without signs of congestion.

The gallbladder was non distended in size with echogenic, nonmineralized, non-dependent biliary sludge. The biliary sludge was non organized with a hypoechoic to anechoic, irregular to interrupted rim visible between the nondependent sludge and inner wall. No signs of gallbladder or peripheral inflammation. The cystic and common bile ducts were normal.

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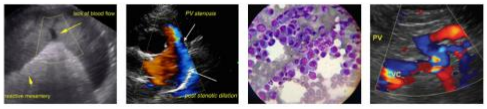

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### *Gastrointestinal*

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained moderate ingesta was present, exhibiting progressive distal acoustic shadowing. No evidence of pyloric outflow obstruction. The pylorus wall measured 0.30 cm.

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 0.35 cm. The jejunum wall measured 0.35 cm.

Normal visible colon wall layers were present with formed to semi-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.

### *Free Abdomen*

No overt lymphadenopathy or peritoneal effusion was present.

## ULTRASONOGRAPHIC FINDINGS

### *Primary Findings*

- Hepatomegaly, exhibiting mild generalized increased parenchyma echogenicity with focal to intermittent discreet intraparenchymal nodules.
- Moderate gallbladder debris- possible emerging to early gallbladder mucocele
- Bilateral prominent adrenal glands
- Overtly normal gastrointestinal tract with moderate gastric ingesta

### *Secondary Findings*

- Moderate chronic renal changes with mild pyelectasia
- Mild pancreatic remodeling

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The left and right pyelectasia may be owing to chronic renal changes, potential pelvic scarring possibly owing to previous calculi passage, IV fluid therapy (if applicable). Urine C/S and protein: creatinine ratio on sterile urine sample is recommended.

The presence of gastric ingesta likely coincides with recent meal ingestion. If documented NPO, potential for some degree of metabolic delay, gastric emptying or stasis may be considered. Likewise, potential for structurally insignificant gastrointestinal disease given the patient weight loss cannot be definitively excluded. A GI panel to include PLI/TLI/Cobalamin/Folate as well as three view chest radiographs and neurological / musculoskeletal examination are recommended to assess for or rule out occult disease which may cause weight loss.

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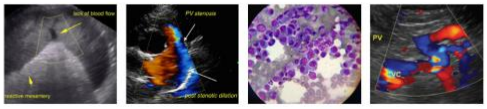

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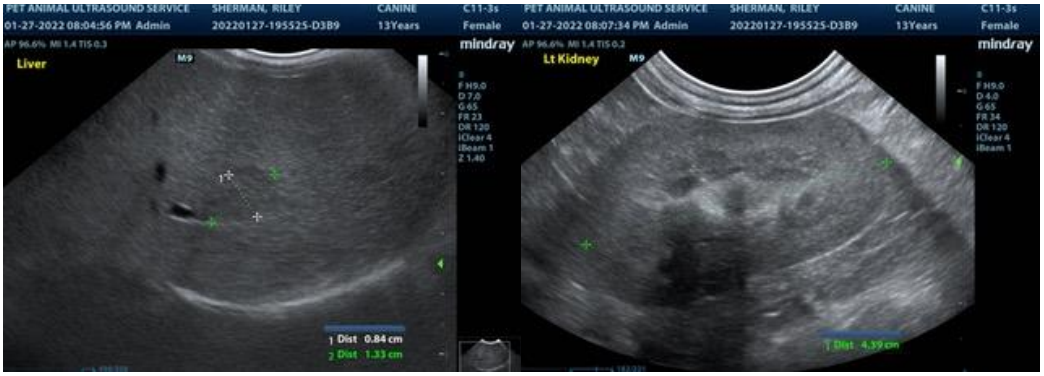
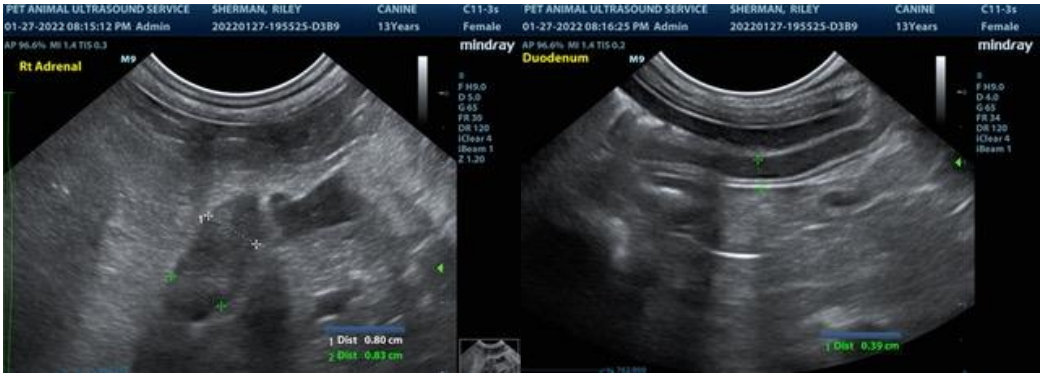
If strong suspicion of hyperadrenocorticism based on clinical signs, UCCR and presentation of the bilateral adrenal glands. Recheck LDDST could be considered in 4-6 weeks. The weight loss does not overtly fit with hyperadrenocorticism, however. Screening blood pressure would be warranted.

Hepatosupportive medications including Ursodiol given the subjective early gallbladder mucocele would be appropriate. Additional diagnostics may include a urine culture and sensitivity on sterile urine sample, if not done given the PU/PD.







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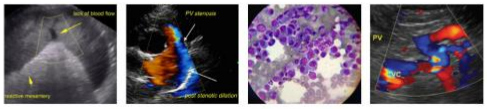

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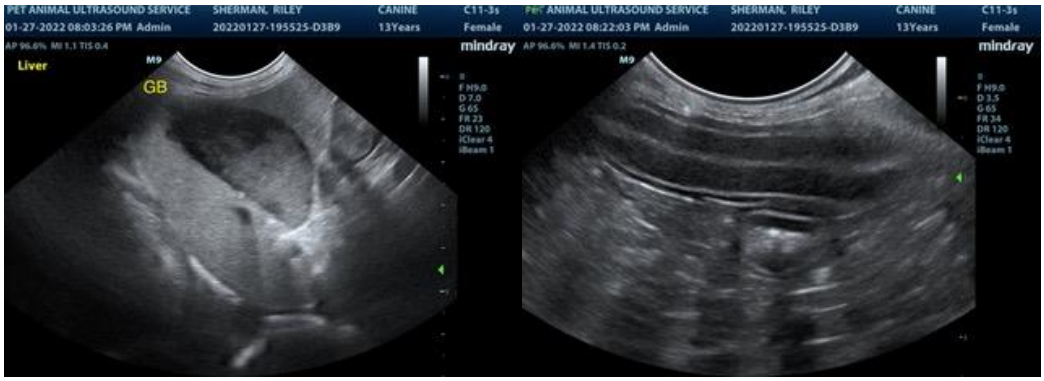


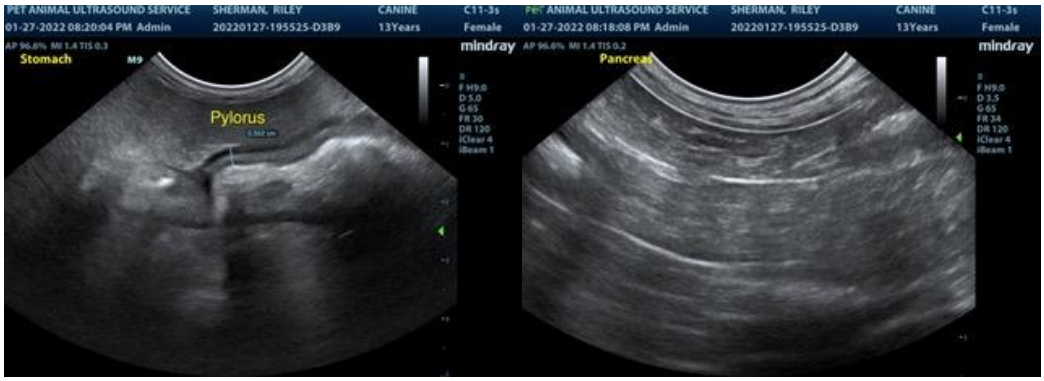


**The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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**