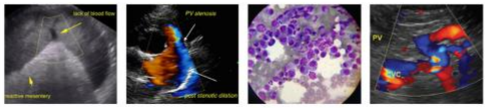




**PATIENT**

Bella Leger

**SPECIES**

Canine

**BREED**

Terrier Mix

**SEX**

Spayed Female

**AGE**

10 Years

**WEIGHT**

19.8 Pounds

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Pamela Harrigan, RDCS

**HOSPITAL NAME**

Barnstable AH

**REFERRING VET**

Mary Ware, DVM

**INVOICE**

14888

**DATE**

4/25/22

## PRESENTING CLINICAL SIGNS

History: Presents for pot-bellied appearance, PU/PD. LDDS test in 2021 not conclusive for Cushing's - AUS to assess liver and adrenal glands. ALP 2500, increased cholesterol, albumin, potassium. On Denosyl - recently changed to liquid mild thistle; recently on Clavamox for UTI

## 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. Mild nondependent particulate sediment was present as well as pinpoint to focal areas of dependent mineral in the area of the urinary bladder neck and proximal urethra. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

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. Focal areas of nonobstructive medullary mineral noted along with mild left and right pyelectasia. The left kidney measured 5.3 cm in length. The right kidney measured 5.3 cm in length.

### *Adrenal Glands*

Bilateral symmetrical adrenal glands were mildly prominent in size with uniformly hypoechoic parenchyma was present. The left adrenal gland measured 0.60 cm width at the caudal pole and 0.56 cm width at the cranial pole. The right adrenal gland measured 0.71 cm width at the caudal pole and 0.66 cm width at the cranial pole.

### *Spleen*

The spleen was normal in size with subtle areas of medial capsule asymmetry. Generalized mildly nonuniform hyperechoic splenic parenchyma. No masses or nodules noted. Normal splenic vascularity noted.

### *Liver*

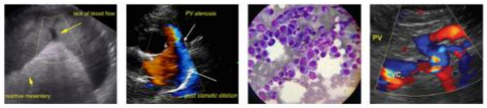
The liver exhibited generalized enlargement with normal structure and contour. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild to benign parenchymal remodeling. The hepatic and portal vasculature were normal in appearance without signs of congestion. Intermittent subtle hyperechoic parenchymal nodules were present, likely consistent with areas of nodular to regenerative hyperplasia or small lipogranulomas with potential for fibrosis. No evidence of hepatic neoplastic criteria.

The gallbladder was non distended in size with moderate focally inspissated yet mobile gallbladder debris. The cystic duct and common bile ducts were normal without evidence of dilation. No overt evidence of peripheral gallbladder inflammation.

### *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.

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.





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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.

***Free Abdomen***

No overt lymphadenopathy or peritoneal effusion was present.

## ULTRASONOGRAPHIC FINDINGS

### Primary Findings

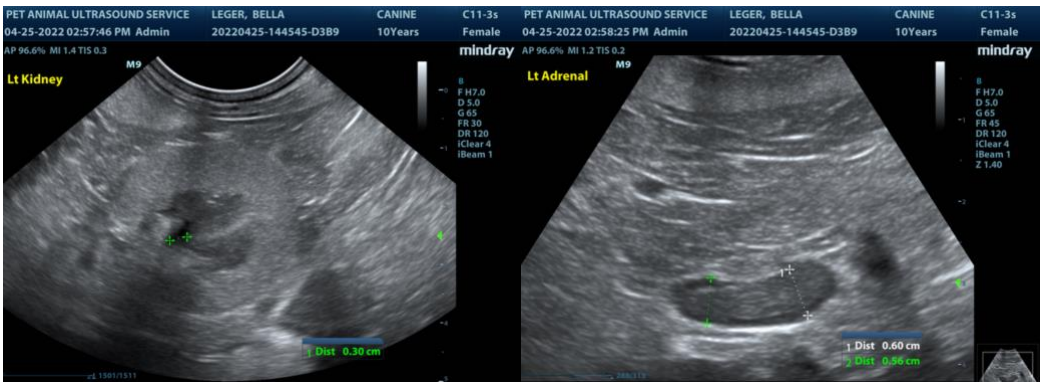
- Hepatopathy, exhibiting parenchymal remodeling and intermittent benign nodules
- Moderate inspissated yet mobile gallbladder debris- possible very early gallbladder mucocele +/- low-grade cholecystitis
- Hyperechoic spleen- subjectively benign
- Chronic renal changes, exhibiting pinpoint medullary mineral and mild pyelectasia
- Minor nonobstructive urinary bladder neck mineral
- Subjective mild prominent bilateral adrenal glands

### Secondary Findings

- Pancreatic parenchymal remolding- suspect age-related pancreatic changes, considered incidental

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

It is suspected that this patient may be passing small amounts of mineral from the kidneys into the urinary bladder resulting in possible minor pelvic scarring. Full urinary work up, including urine culture and sensitivity on sterile urine sample recommended. Recheck adrenal testing with LDDST could be considered if strong clinical suspicion for hyperadrenocorticism. No evidence of hepatoadrenal neoplastic criteria. In addition to hepatosupportive medications, ursodiol may prove beneficial given the presence of gallbladder debris. Although considered a less likely possibility, leptospirosis titers/PCR maybe considered if endemic to the area or potential exposure.



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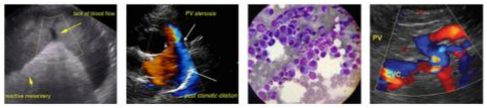

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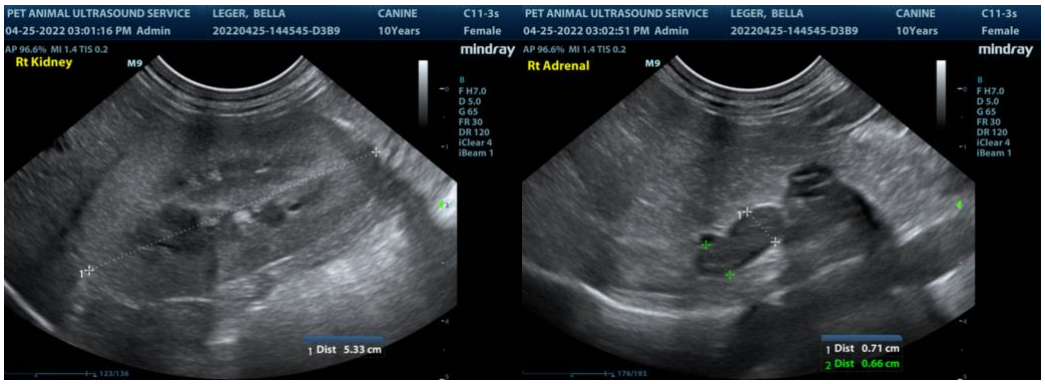


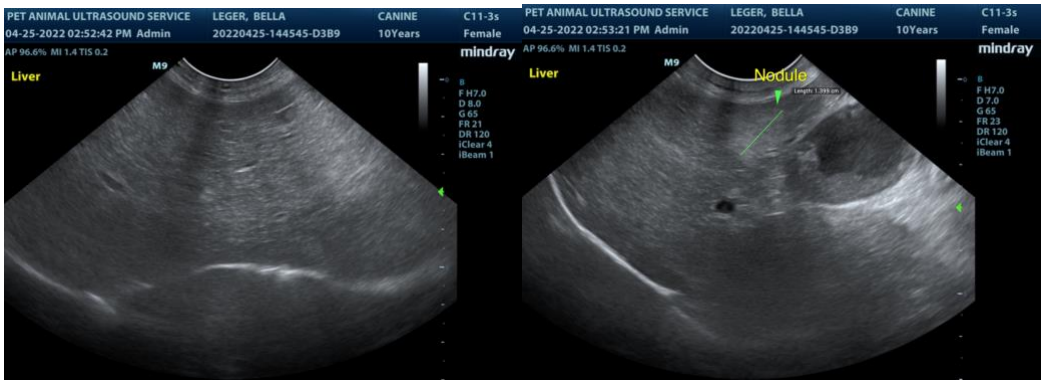


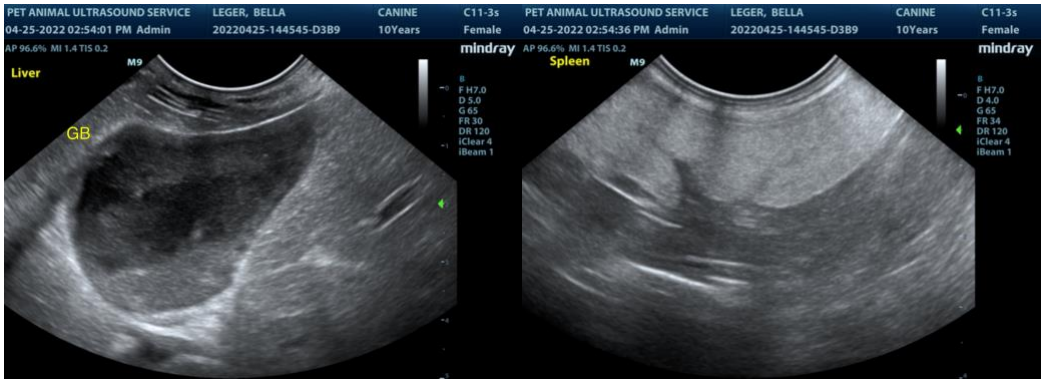


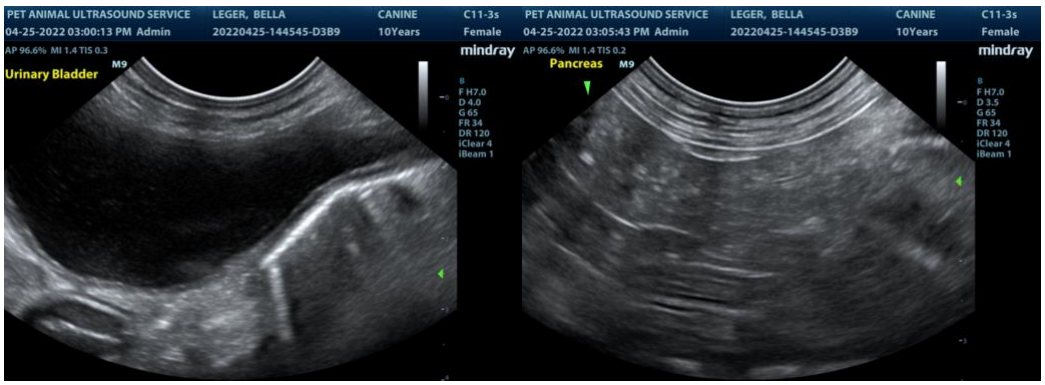

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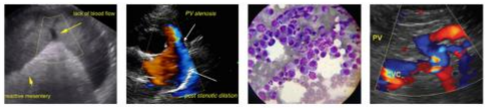

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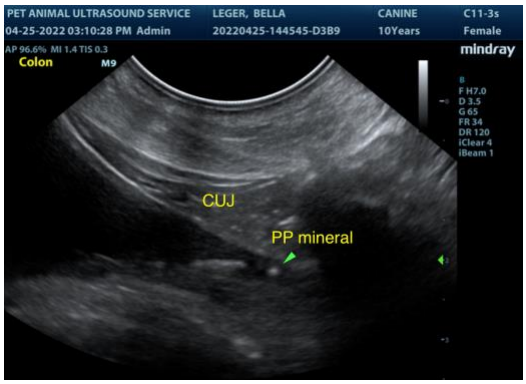


**The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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)**
**info@SonoPath.com**