



**PATIENT PRESENTING CLINICAL SIGNS**

Lulu Barlet Recent PU/PD, dilute urine, history of kidney disease.  
 Medication: HepatoSupport, k/d diet

**SPECIES** Platelets 469, BUN 40, Creatinine 1.8, SDMA 28, Na/K ratio 26, ALP 1006, ALT 128, AST 32, T4 1.5

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED** *Urinary System*

Shetland Sheepdog The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 5.0 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.

**SEX** FS No evidence of pathology was noted In the area of the uterine remnant.

**AGE** The area of the aortic trifurcation was free of pathology.

2010 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. Mild bilateral pyelectasia was present. The left kidney measured 5.7 cm in length. The right kidney measured 5.2 cm in length.

**WEIGHT**

54.8

**Adrenal Glands**

**INTERPRETED BY**

R. McKenzie Daniel, DVM, DABVP (Canine and Feline) The bilateral adrenal glands were indistinctly visualized yet without overt evidence of adrenomegaly or pathology. The left adrenal gland subjectively measured 0.62 width at the caudal pole. The right adrenal gland subjectively measured 0.65 cm width at the caudal pole.

**IMAGING** *Spleen*

**PERFORMED BY**

Rebekah Jakum, CVT ARDMS/RVT The spleen exhibited primarily finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Multiple, nondisruptive, hyperechoic 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. The spleen was overall normal in size and contour.

**HOSPITAL NAME**

Lehigh Valley AH (Allen)

**REFERRING VET**

Dr. Meyer

**Liver/ Gallbladder**

The liver exhibited potential for borderline to mild enlargement. 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. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal.

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**DATE**

4/18/23



**PATIENT** *Gastrointestinal*

Lulu Barlet 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.

**SPECIES** 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.

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

**BREED** *Pancreas*

Shetland Sheepdog 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.

**SEX** *Free Abdomen*  
 FS

**AGE** No overt lymphadenopathy or peritoneal effusion was present.

**2010** **ULTRASONOGRAPHIC FINDINGS**

*Primary Findings*

- WEIGHT**
- Chronic renal changes with bilateral mild pyelectasia
  - Overtly normal bilateral adrenal glands
  - Nonspecific yet subjective benign hepatopathy

*Secondary Findings*

- Benign splenic nodules - sonographically consistent with benign myelolipomas

**INTERPRETED BY**

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

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**IMAGING PERFORMED BY**  
 Rebekah Jakum, CVT  
 ARDMS/RVT

The bilateral pyelectasia may be owing to chronic renal changes, potential pelvic scarring possibly owing to previous calculi passage, IV fluid therapy (if applicable). Further assessment may include screening C/S and baseline UPC level, if evidence of proteinuria on urinalysis.

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Full adrenal workup may be considered if strong clinical suspicion for Cushing's Syndrome. Leptospirosis titers / PCR may be considered, if endemic to the area or potential exposure.

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No overt evidence of intraabdominal neoplastic criteria was noted.

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Hepatosupportive medications including Denamarin and Ursodiol may prove beneficial. No overt suspicion of hepatic dysfunction as a contributing factor to the PU/PD, given normal glucose, albumin, and cholesterol levels. CKD therapy with monitoring of systemic BP and renal parameters going forward would be reasonable.

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**PATIENT**

Lulu Barlet

**SPECIES**

Canine

**BREED**

Shetland Sheepdog

**SEX**

FS

**AGE**

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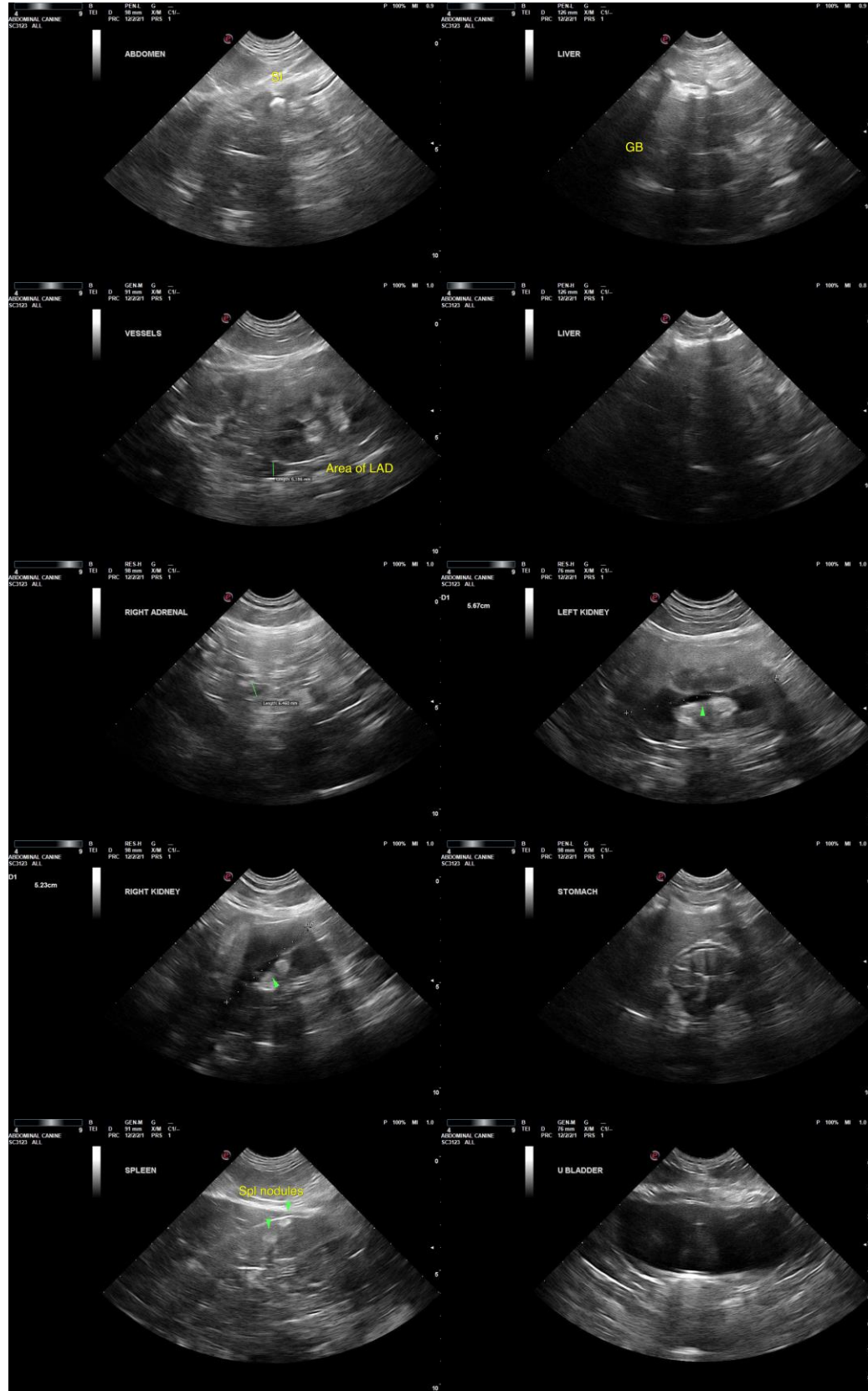
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**PATIENT**

Lulu Barlet

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.

**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**

Shetland Sheepdog

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

FS

**AGE**

2010

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54.8

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