

**DATE PRESENTING CLINICAL SIGNS**

8/2/22 Hx of microvascular dysplasia (bx done May 2022). Currently under tx with Specialist at UPenn. UPenn request repeat scan. Patient doing ok, intermittent picky appetite (has been picky since puppy)

**PATIENT**

Luna Willett

Current Medications: Ursodiol 250mg/ml 0.25cc QD, Denamarin

Date of Previous IntraPet Ultrasound: 4/19/22. See attached.

Sedation: Torbugesic/Valium IV.

Stat Report: Not requested.

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****BREED**

Havanese

**Urinary System**

The urinary bladder is moderately distended with echogenic debris. This debris appears mobile and settles to the dependent portions of the urinary bladder. The Bladder wall appears relatively smooth with no focal mass lesions observed and no calculi observed. Discolored urine is noted on cystocentesis. Cystocentesis was performed and was uneventful.

**SEX**

Spayed Female

The left kidney has a normal shape and size (3.78 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**AGE**

4/8/17

The right kidney has a normal shape and size (3.63 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**WEIGHT**

12.4 Pounds

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.47 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

**IMAGING PERFORMED BY**

Stephanie Warga  
RDMS, RVT

The right adrenal gland is normal in size measuring 0.45 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

**HOSPITAL NAME**

Happier at Home  
Mobile Vet

**Spleen**

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

**REFERRING VET**

Dr. Haskin

**Liver**

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

**INVOICE**

40053

The gall bladder lumen is significantly distended. Some areas of the wall appear mildly thickened with adherent debris. There is a large amount of primarily non-organized echogenic debris. There is no evidence of bile duct dilation. These changes can be consistent with an early gall bladder mucocele.

### ***Gastrointestinal***

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measures 0.22 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

### ***Pancreas***

The pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

### ***Free Abdomen***

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

## **ULTRASONOGRAPHIC FINDINGS**

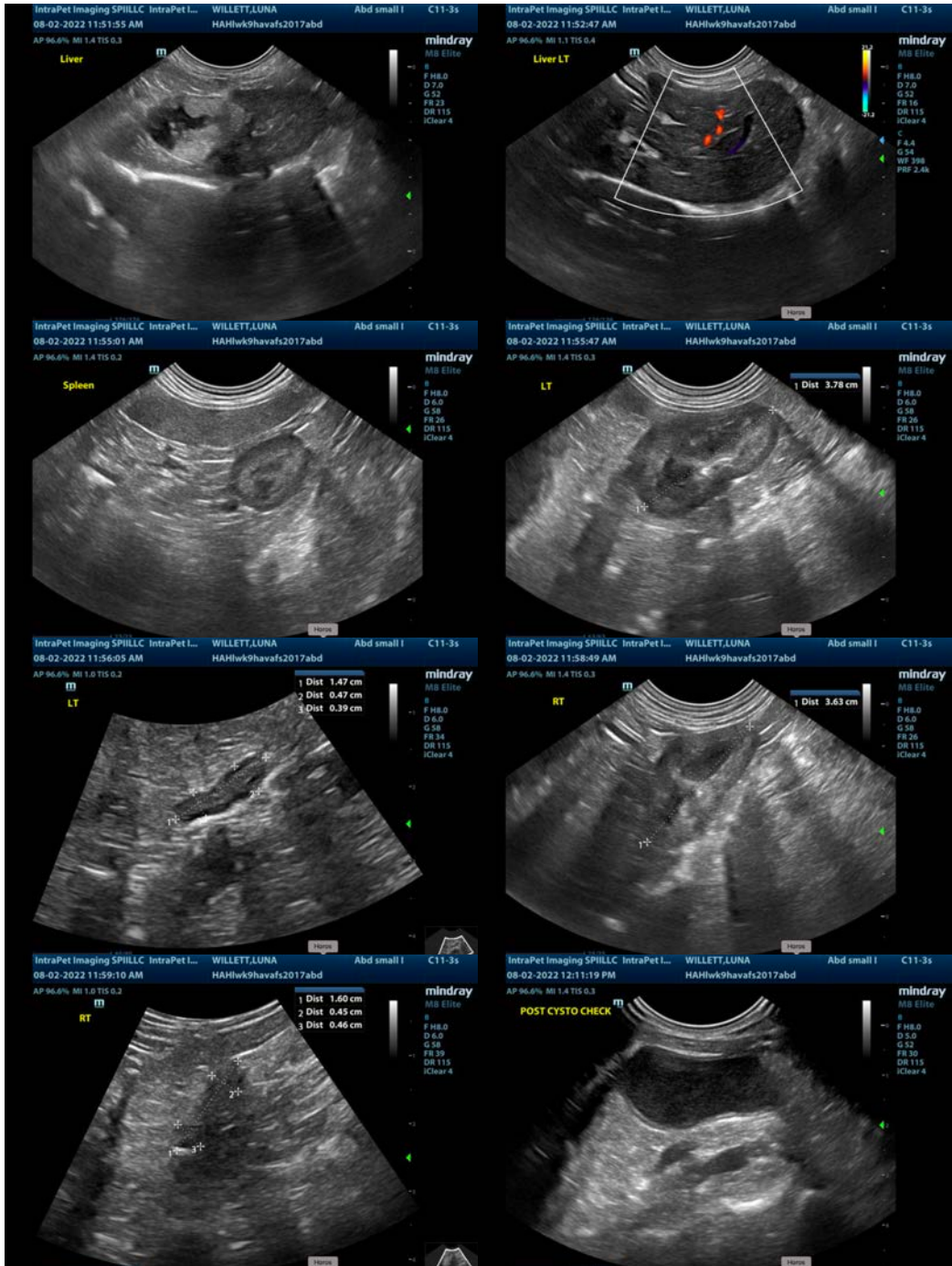
- Echogenic debris in the dependent portions of the urinary bladder – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus.
- Large gallbladder debris – The significance of the aggregated gallbladder sludge is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.

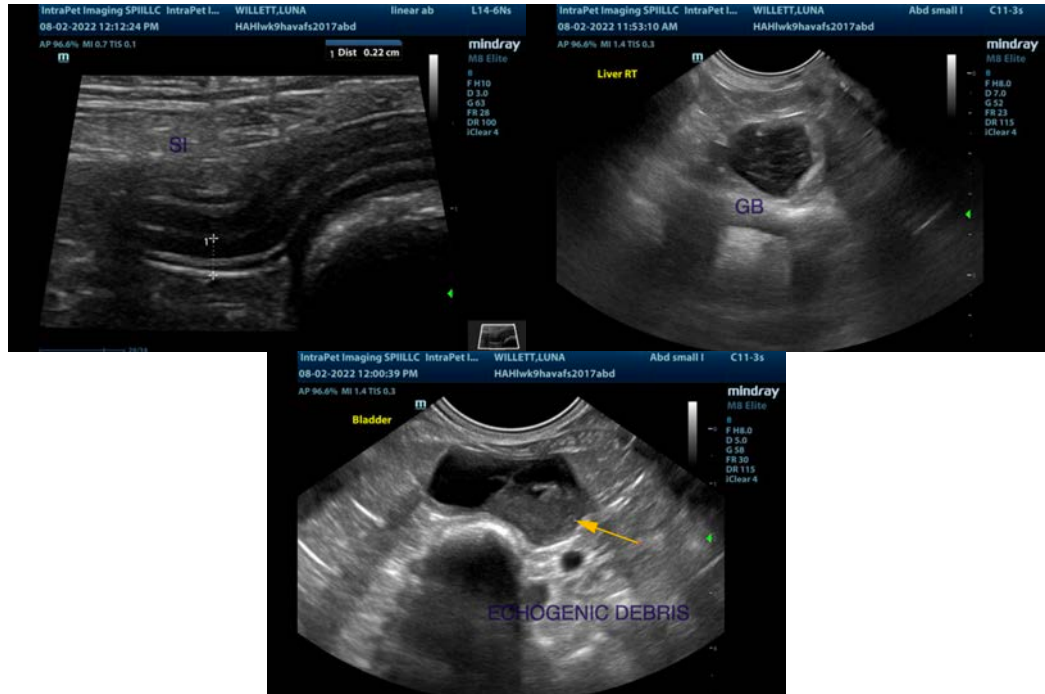
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

There is a large amount of swirling debris visualized within the urinary bladder. Upon sampling, the urine is discolored. Recommend urinalysis and culture to further evaluate this abnormality, and consider continued monitoring of the urinary bladder, as no focal mass lesions are observed on today's scan.

Today's scan appears similar to the previous scan performed on 4/19/22. The debris visualized in the urinary bladder is a new finding. The significance of this is currently unclear.

The gallbladder was previously examined to have a moderate amount of debris within the lumen. Today's findings are similar, possibly mildly progressed, but there is no evidence of a mucocele or significant inflammation. You are currently administering Ursodiol, so correlate with bloodwork findings, and continued monitoring with medical management is warranted. Consider a liver function test to further evaluate for progression and deterioration of liver function. Additionally, consider other differentials for the reduced appetite described.





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.

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