

**DATE PRESENTING CLINICAL SIGNS**

5/5/22 Hx of elevated SDMA. Hx of elevated Cardio Pro BNP.

**PATIENT** Current Medications: Ursodiol 200mg ¼ SID, Galliprant 20mg ½ BID.

Abbey Harris

Lab Results: See attached.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Torbugesic/Midazolam IM prior to sonographer arrival.

Stat Report: Not requested.

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****BREED** *Urinary System*

Rat Terrier

The urinary bladder is mildly to moderately distended with anechoic urine. The Bladder wall largely appears normal, but the apical portion is slightly thickened and irregular, measuring 0.49 cm. The area of the trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal and free of any mucosal irregularities, calculi or mass effects. The apical thickening is likely associated with lack of urine distention, bacterial cystitis, or less likely a neoplastic lesion.

**SEX**

Spayed Female

**AGE**

3/5/08

The left kidney has a normal shape and size (3.03 cm). Overall echogenicity is slightly hyperechoic with poor 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**

11.8 Pounds

The right kidney has a normal shape and size (3.71 cm). Overall echogenicity is slightly hyperechoic with poor 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.

**INTERPRETED BY**

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

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.65 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 Pearce  
RDCS, RVT

The right adrenal gland is normal in size measuring 0.32 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.

**Spleen****HOSPITAL NAME**

Happy Tails VH

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.

**Liver****REFERRING VET**

Dr. Calpeno

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**

37423

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a mild amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

### ***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. There is a moderate amount of air in the gastric lumen, which is shadowing and prevents full evaluation of the stomach.

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. The duodenum measured as normal (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) 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.

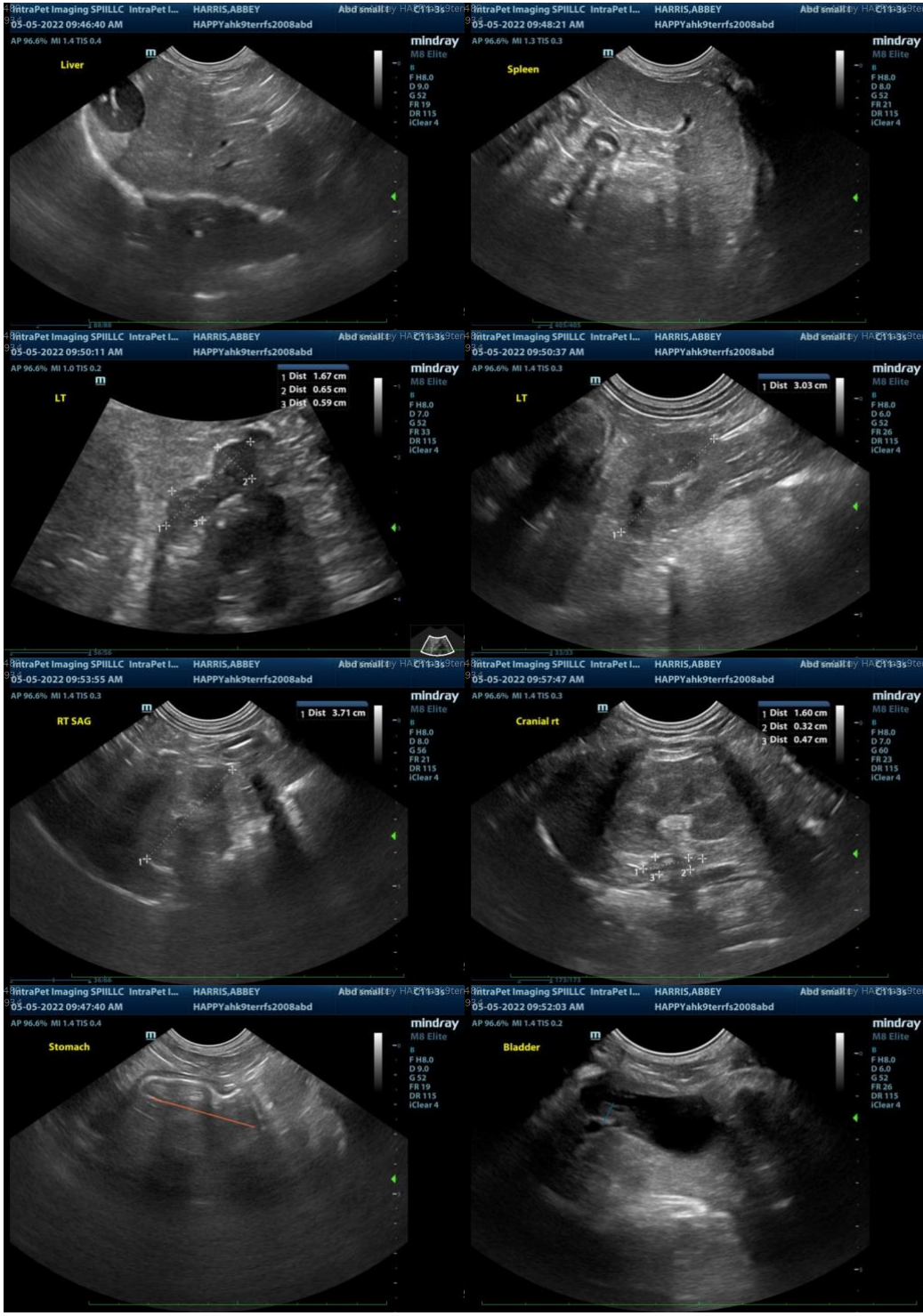
## **ULTRASONOGRAPHIC FINDINGS**

- Mild thickening of the apical region of the urinary bladder – Possible differentials include lack of urine distention, bacterial cystitis or less likely intestinal neoplasia.
- Decreased corticomedullary distinction in both kidneys – The bilateral renal findings are consistent with age-related change.
- Mild 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**

The elevated SDMA levels reported are likely due to chronic progressive age related renal disease. Recommend urinalysis, culture, and blood pressure evaluation.

There is mild thickening of the bladder wall in the apical portion. This could be secondary to lack of urine distention or bacterial cystitis (recommend the aforementioned urinalysis and culture) and consider reevaluation of the urinary bladder when it is more full, and after treatment of a urinary tract infection (if present).



**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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