

**DATE PRESENTING CLINICAL SIGNS**

4/26/23 Recheck previously noted u/s abnormalities/changes. Recheck bladder, Small hypoechoic nodule visualized within the splenic parenchyma, Heterogeneous liver with occasional ill-defined hypoechoic nodules, Moderate gallbladder debris, Prominent, irregular, large lymph node associated with the colon

**PATIENT**

Gidget Fitzsimmons

Current Medications: Chronic Hydroxyzine.

**SPECIES**

Canine

Lab Results: most recent UA was 1/19/2023: did not have increased WBCs or increased epithelial cells as in past, SP GRAVITY 1.038, PH 5.0, PROTEIN TRACE, UROB NORMAL, WBC UAM 0-2 HPF 0 - 5, RBC UAM 30-50 HPF, BACTERIA NONE SEEN, EPI CELL 1+ (1-2)/HPF, MUCUS NONE SEEN, CASTS NONE SEEN, CRYSTALS NONE SEEN, U PRO/CREA 0.2, COLOR DARK YELLOW

Date of Previous IntraPet Ultrasound: 1/4/23. See attached.

**BREED**

Kyj-Leo

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

**SEX**

Spayed Female

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

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

**AGE**

6/20/13

The left kidney has a normal shape and size (3.08 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**WEIGHT**

8.36 Pounds

The right kidney has a normal shape and size (3.58 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal 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 0.41 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.

**HOSPITAL NAME**

Frederick Road VH

**REFERRING VET**

Dr. Beyer

The right adrenal gland is normal in size measuring 0.53 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.

**INVOICE**

46945

**Spleen**

The spleen is subjectively normal in size. The spleen echotexture is heterogenous and mottled, the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. The previously described hypoechoic nodule visualized approximately mid to caudal body measures at 0.58 cm x 0.38 cm (previous measurement 0.65 cm x 0.30 cm) and appears relatively static. There are additional ill-defined hypoechoic nodules visualized. One is adjacent to the first nodule towards the caudal aspect of the spleen measuring 0.33 cm. There are at least two additional nodules towards the head of the spleen measuring 0.44 cm and 0.45 cm x 0.34 cm.

### **Liver**

The liver is large in size, and normal in echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. The previously described nodule is not clearly visualized on today's exam, but there are some subtle hypoechoic nodules.

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 moderate 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. 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. Duodenum wall measures 0.30 cm. Jejunum wall measures 0.26 cm. Mild mucosal speckling is visualized in some areas of the small intestine. 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. There is a prominent lymph node visualized near the colon measuring 0.73 cm x 0.90 cm (previous measurements 0.90 cm x 0.74 cm). This structure is stable. There is also a prominent sublumbar lymph node measuring 1.36 cm x 0.47 cm. The omentum is generally of normal echogenicity.

### **Other**

The right auricle and pericardium were visualized and were unremarkable. No obvious pathology is visualized. If cardiac function evaluation is desired a full echocardiogram is warranted.

No pleural effusion or nodules/mass effects are visualized.

## **ULTRASONOGRAPHIC FINDINGS**

- Multiple ill-defined, hypoechoic splenic nodules – Differentials include lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis. The previously visualized hypoechoic nodule appears stable in size.
- Large, heterogeneous liver with ill-defined hypoechoic nodules – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy. The appearance of the liver

appears stable.

- Moderate gallbladder – The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting but seems unlikely to be causing a current issue. Recommend continued monitoring.
- Moderate mucosal speckling of the small intestine – Bright mucosal speckling has been postulated to represent dilated lacteals or focal accumulations of mucus, cellular debris, etc.. in the mucosal crypts. In the absence of underlying gastrointestinal signs/disease, the significance of this is unclear.
- Large, hypoechoic, round structure adjacent to the colon – This is most consistent with a large lymph node, although an atypical cystic structure can't be ruled out. This appears stable.
- Prominent/large sublumbar lymph node – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

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

Today's scan appears relatively stable from the previous scan on 1/4/23. No lesions are visualized within the urinary bladder to explain the hematuria reported. If this is persistent, particularly if there is straining involved, I would consider cystoscopy to further evaluate the vaginal vault, urethra, etc.

There are numerous ill-defined hypoechoic nodules visualized in the spleen. The previously visualized nodule appears stable. These could represent benign lesions or early neoplastic lesions. Options moving forward would include fine needle aspirate or continued monitoring. The stable nature of the previously visualized hypoechoic nodule trends towards a more benign lesion.

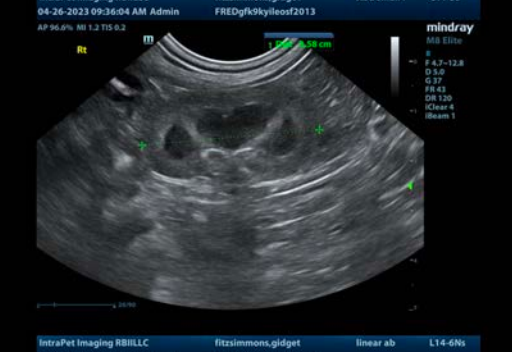
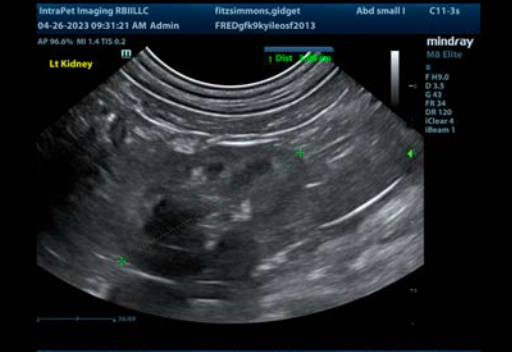
The significance of the hepatic changes are uncertain. Correlate with lab work findings, etc. This could represent age related remodeling or a primary hepatopathy.

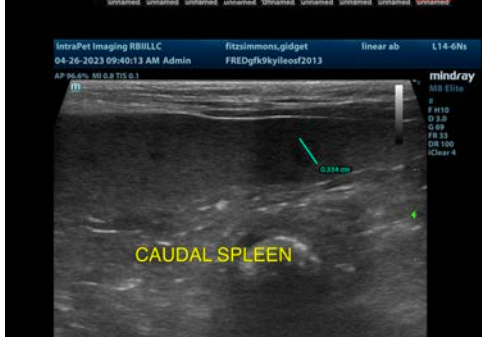
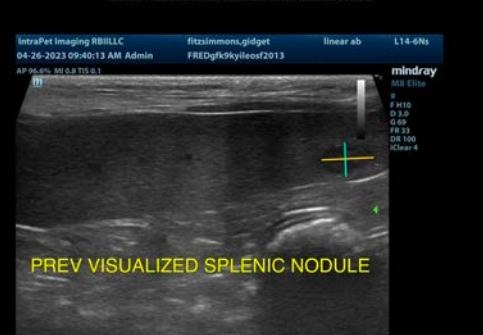
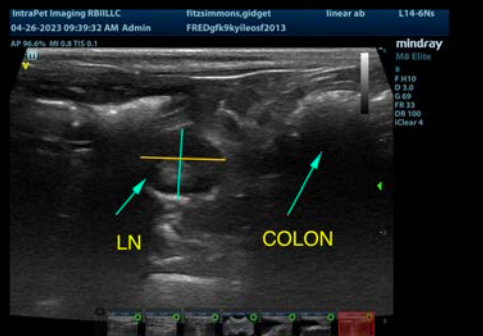
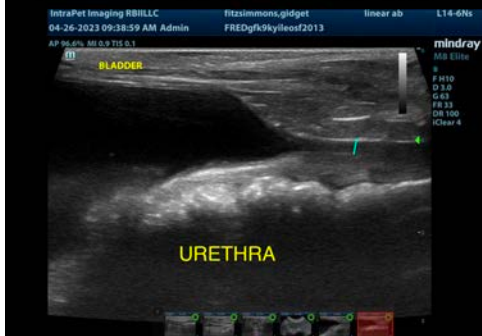
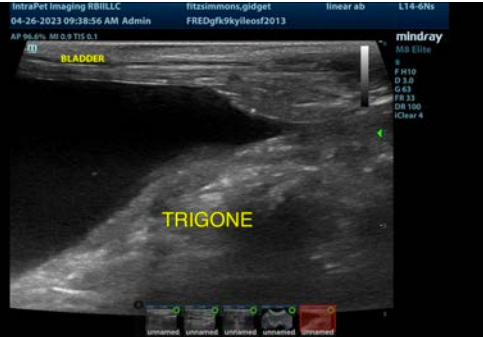
There is mild mucosal speckling visualized associated with the small intestine. This can be associated with a primary enteropathy, but if no GI signs are present, then continued monitoring is warranted.

The prominent lymph node/rounded hypoechoic structure associated with the colon is persistent and stable in size. Additionally, there is a prominent sublumbar lymph node noted on today's exam. I suspect this was present on the previous exam as well, but now is clearly differentiated from the structure visualized near the colon.

The sublumbar lymph node is likely too small to easily sample adjacent to the large vessels. The colonic lymph node could be considered if a safe window is identified.

Overall, there have been no dramatic changes in today's scan. If the patient is not doing well, then consider additional diagnostics as 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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