

**DATE PRESENTING CLINICAL SIGNS**

4/29/22

Hind end collapsed to sitting position and she was trying to pull herself forward. shortly after, she was able to stand and walk and get in/out of van. no limping or pain. history of left rear limb lameness 12/2021 suspected ccl partial. resolved with rest, Rimadyl, gabapentin.

**PATIENT**

Fiona Lowery

BAR, BCS 5/9, mm/crt wnl, heart/lungs clear, no murmur/arrhythmia ausculted, pulses strong/synchronous, abd compliant. mild reaction to palpation of lumbar vertebrae and extension of hips and palpation of iliopsoas mm. rectal nsf, temp normal, no lameness noted, cp wnl.

**SPECIES**

Canine

Current Medications: Rimadyl 50 mg bid, Dasuquin bid  
 Lab Results: Cbc wnl HCT48.6%. General health profile nsf  
 glucose 91 md/dl.

**BREED**

German Shepherd

Date of Previous IntraPet Ultrasound: 6/21/16. See attached.  
 Sedation: Patient sedated with Torbugesic.  
 Stat Report: Not requested.

**SEX**

Spayed Female

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****AGE**

9/1/11

**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.

**WEIGHT**

61.8 Pounds

The left kidney has a normal shape and size (6.74 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.

**INTERPRETED BY**

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

The right kidney has a normal shape and size (7.41 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.

**IMAGING PERFORMED BY**

Andi Parkinson RDMS

**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.

**HOSPITAL NAME**

Jacksonville VH

The right adrenal gland is normal in size measuring 0.51 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.

**REFERRING VET**

Dr. Burk

**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. There are multiple, somewhat ill-defined, hypoechoic nodules visualized within the splenic parenchyma, measuring 0.87, 1.42, and 1.48 cm.

**INVOICE**

37292

**Liver**

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is mildly heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. A small, isoechoic nodule is visualized within the parenchyma, measuring 1.18 cm.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. 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. 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.

### ***Other***

A brief view of the heart was submitted. No significant pericardial effusion was seen.

## **ULTRASONOGRAPHIC FINDINGS**

- Mottled spleen with hypoechoic splenic nodule – There are non-cavitated, hypoechoic splenic nodules visualized. Differentials include lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.
- Mildly heterogeneous liver with small isoechoic nodule – 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.

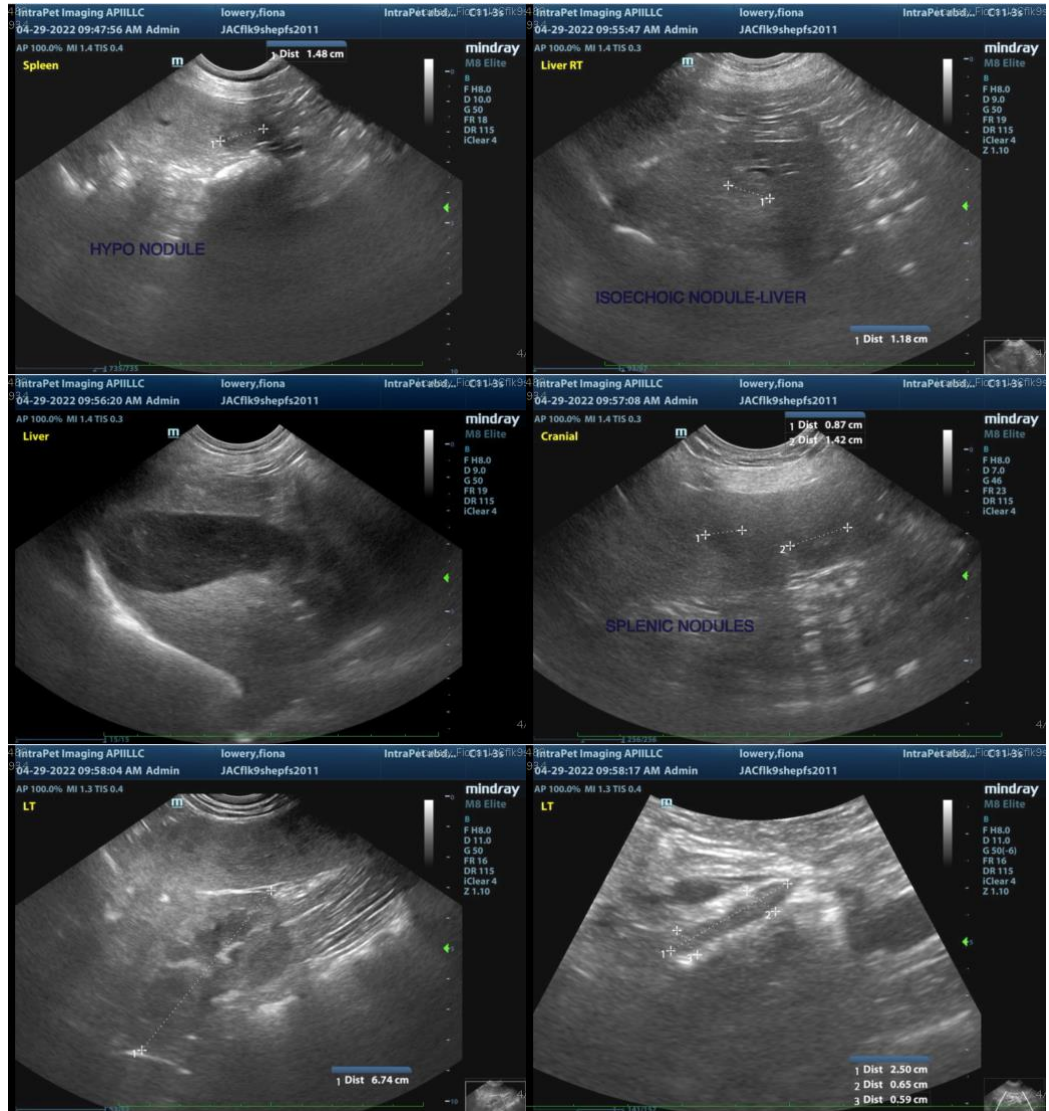
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

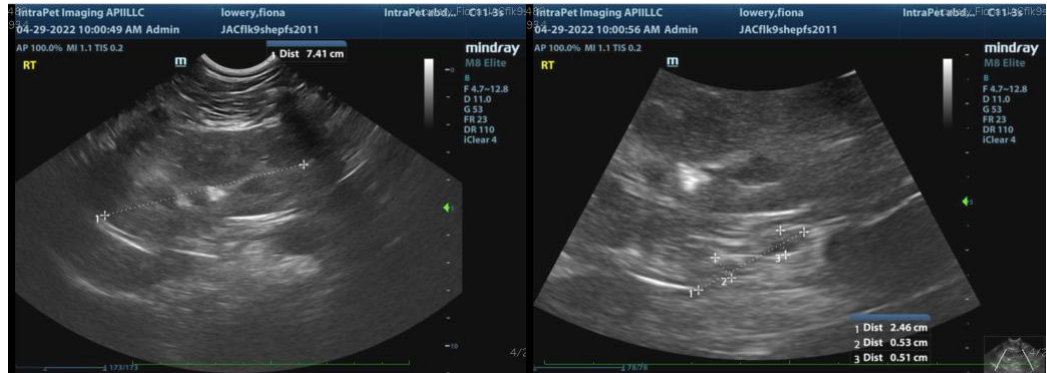
There are multiple hypoechoic nodules visualized within the spleen. These lesions could be benign or may represent neoplastic change. Given the breed predisposition, I would recommend a fine needle aspirate of these lesions +/- splenectomy.

The changes in the liver are non-specific and subtle. Recommend continued monitoring of the small isoechoic nodule visualized.

Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.

The association between these findings and the episode of pelvic limb weakness is unknown at this time. Consider consultation with a veterinary neurologist, as a vascular incident (FCE, clot, etc.) could be possible.





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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)  
kathleen.sennello@sonopath.com