

**DATE PRESENTING CLINICAL SIGNS**

5/10/22

Rescue group obtained from shelter 4/29/22. No previous history. PE- dental disease, bilateral carnassial tooth abscesses.

**PATIENT**

Melanie Isbell

Current Medications: Clindamycin 150mg BID since 4/24/22, Galliprant 20mg SID 5/3-5/10.

Lab Results: ALT 190, ALKP 614, GGT 24, Cholesterol 355. UA- protein 2+, USG 1.049.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**SPECIES**

Canine

Imaging Performed By: Stephanie Pearce RDCS, RVT.

**BREED**

Shetland Sheepdog

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

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is mildly to moderately distended with anechoic urine. A scant amount of echogenic debris is suspended within the lumen. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

**SEX**

Female, intact

The left kidney is normal in size (5.01 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild to moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. Pinpoint hyperechoic foci are observed throughout the cortex. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

**AGE**

5/1/2012

**WEIGHT**

29.7 lbs.

The right kidney is normal size (5.02 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild to moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. Pinpoint hyperechoic foci are observed throughout the cortex. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

**INTERPRETED BY**

Andrea Nicastro, DVM,  
Diplomate ACVIM  
(*Small Animal Internal  
Medicine*)

**Adrenal Glands**

The left adrenal gland is normal size (0.56 cm at cranial pole) (0.57 cm at caudal pole) (2.63 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**HOSPITAL NAME**

Bel Air VH

The right adrenal gland is normal size (0.80 cm at cranial pole) (0.66 cm at caudal pole) (2.59 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**REFERRING VET**

Dr. Schmidt

**Spleen**

The spleen is subjectively normal in width (1.71 cm in width at the level of the hilus) with an elongated contour and normal peripheral margins. The parenchyma is homogeneous. No focal lesions are observed. Splenic vasculature is normal with no evidence of thrombosis.

**INVOICE**

13352

**Liver**

The liver is subjectively prominent in size with swollen curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits mild heterogeneity. No distinct focal lesions are observed. Hepatic vasculature and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is thin and smooth. A moderate amount of aggregated, echogenic partially-dependent slightly stranding debris/sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

### ***Gastrointestinal***

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is mildly distended with ingesta. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

### ***Pancreas***

The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

### ***Free Abdomen***

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings:**

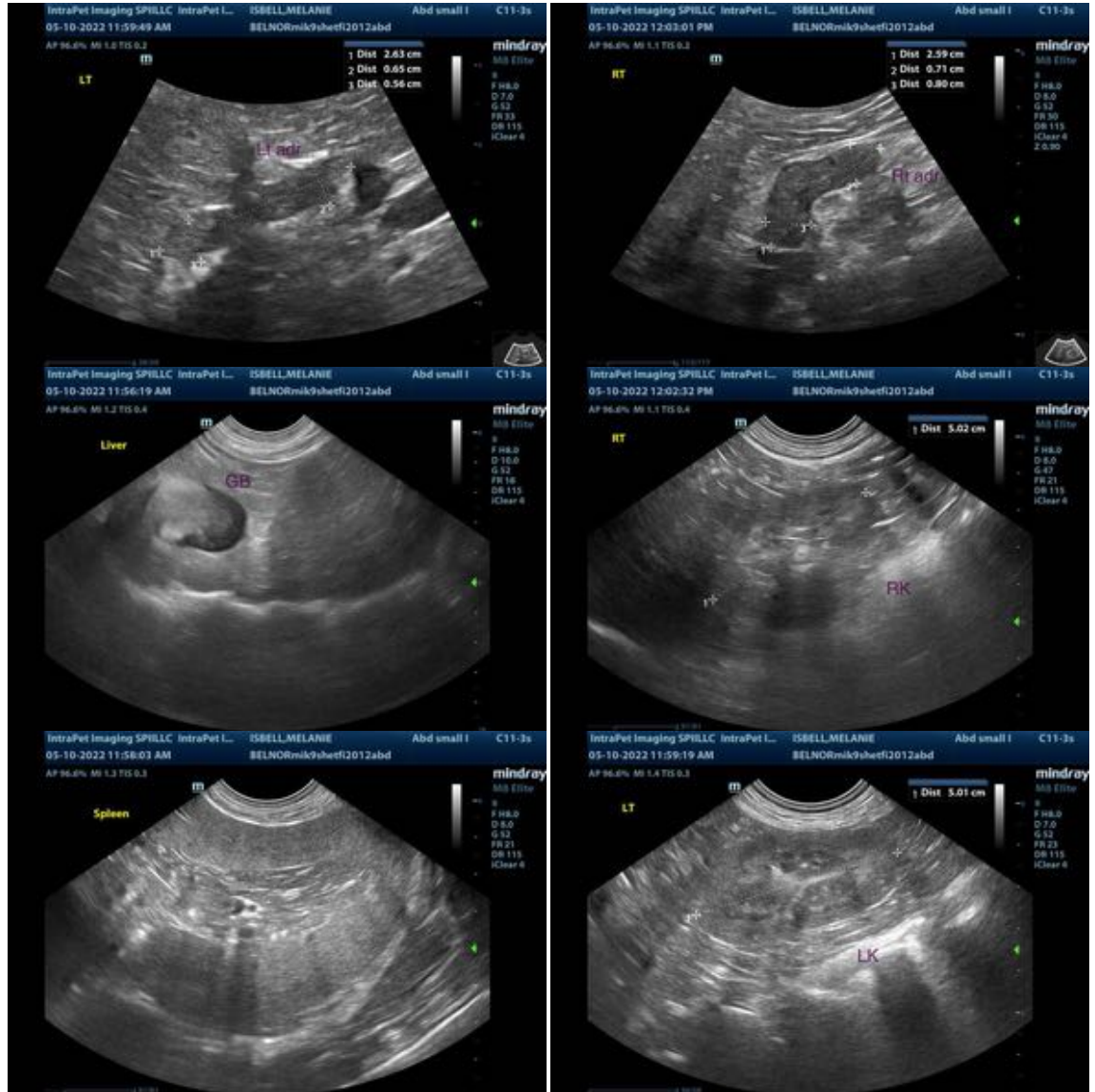
- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely.
- The significance of the gallbladder debris/sludge is unclear. It may be secondary to fasting or cholestasis. However, given the breed, there is potential for the development of a mucocele. Therefore, this should be monitored.

### **Secondary Findings:**

- Bilateral, age-related renal changes with dystrophic mineralization.
- The elongated spleen may be a normal variant for this patient or may be secondary to a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis, splenitis or antigenic stimulation. Infiltrative neoplasia (i.e., round cell tumor) is possible but considered less likely.

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

- Serial monitoring (i.e., every 3-4 months) of the patient's liver values is recommended. If liver values continue to increase, a repeat abdominal ultrasound +/- hepatic tissue sampling may be warranted.
- Given the proteinuria, a UPC is recommended.
- Consider serial sonographic monitoring (i.e., every 4-6 months) of the patient's gallbladder to assess for the development of a mucocele.



The information and recommendations provided are based on the images presented by the referring veterinarian. 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.

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)  
 Andrea.nicastro@sonopath.com