

IMAGING PERFORMED BY

IntraPet.com



**SonoPath**

Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™

1-800-838-4268 info@sonopath.com SonoPath.com

**DATE PRESENTING CLINICAL SIGNS**

5/25/22 Since coming home from a kennel has had soft stool 5/20/2022. Started vomiting bile on 05/23/2022 about 8 times. Painful abdomen

**PATIENT**

Asia Washington

Current Medications: None listed.

Lab Results: CPL normal.

Radiographs: Possible GI obstruction, soft tissue mass effect in ventral abdomen

Date of Previous IntraPet Ultrasound: No previous.

**SPECIES**

Canine

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Requested by DVM.

**BREED**

Boston Terrier

**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.

**SEX**

Spayed Female

The left kidney has a normal shape and size (5.31 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**

11/13/15

**WEIGHT**

21.4 Pounds

The right kidney has a normal shape and size (4.85 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)

**Adrenal Glands**

The left adrenal gland is normal/borderline large in size measuring 0.93 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**

Andi Parkinson RDMS

The right adrenal gland is normal/borderline large in size measuring 1.13 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**

Glen Burnie AH

**Spleen**

The spleen is normal in echogenicity, but irregular in shape. The blood flow through the hilus and splenic parenchyma appears normal. There are two mass lesions visualized on the spleen. These lesions are relatively isoechoic peripherally and have a hyperechoic area within. One of the masses measures 5.59 cm x 5.09 cm. The other measures 3.83 cm x 4.94 cm. There is no evidence of surrounding free fluid.

**REFERRING VET**

Dr. Shah

**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**

37913

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 uniform diameter with minimal fluid distension. Wall appears subjectively, mildly increased. Bowel loops follow a typical curvilinear path with distinct wall layering. Jejunum wall measured 0.38 cm. Duodenum wall measured 0.47 cm. Visualized peristalsis appears appropriate. There is mild proximal fluid dilation of the duodenum and mild corrugation. Suspect focal enteritis.

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 prominent and hypoechoic as compared to the surrounding isoechoic 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**

- Two large mixed echogenic splenic masses – Two solid, mixed echogenic masses are present within the splenic parenchyma. These masses distort the splenic capsule. Differentials include benign lesions such as lymphoid hyperplasia, hemangioma, etc., or neoplastic lesions such as hemangiosarcoma, lymphoma, histiocytic sarcoma, etc.
- Hypoechoic, prominent pancreas with very mild surrounding mesenteric inflammation – The pancreatic changes are most consistent with mild pancreatitis/pancreatic inflammation. Recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider fine needle aspirate if not improving.
- Moderate gallbladder debris – The significance of the aggregated gallbladder sludge is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.
- Borderline bilateral adrenomegaly – The bilateral adrenomegaly could be consistent with bilateral hyperplasia (e.g., secondary to pituitary-dependent hyperadrenocorticism), bilateral infiltrative neoplasia, inflammatory adrenal disease, other. Correlation with clinical findings is recommended.
- Mild small intestinal thickening and focal duodenitis (likely associated with the inflamed pancreas)

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

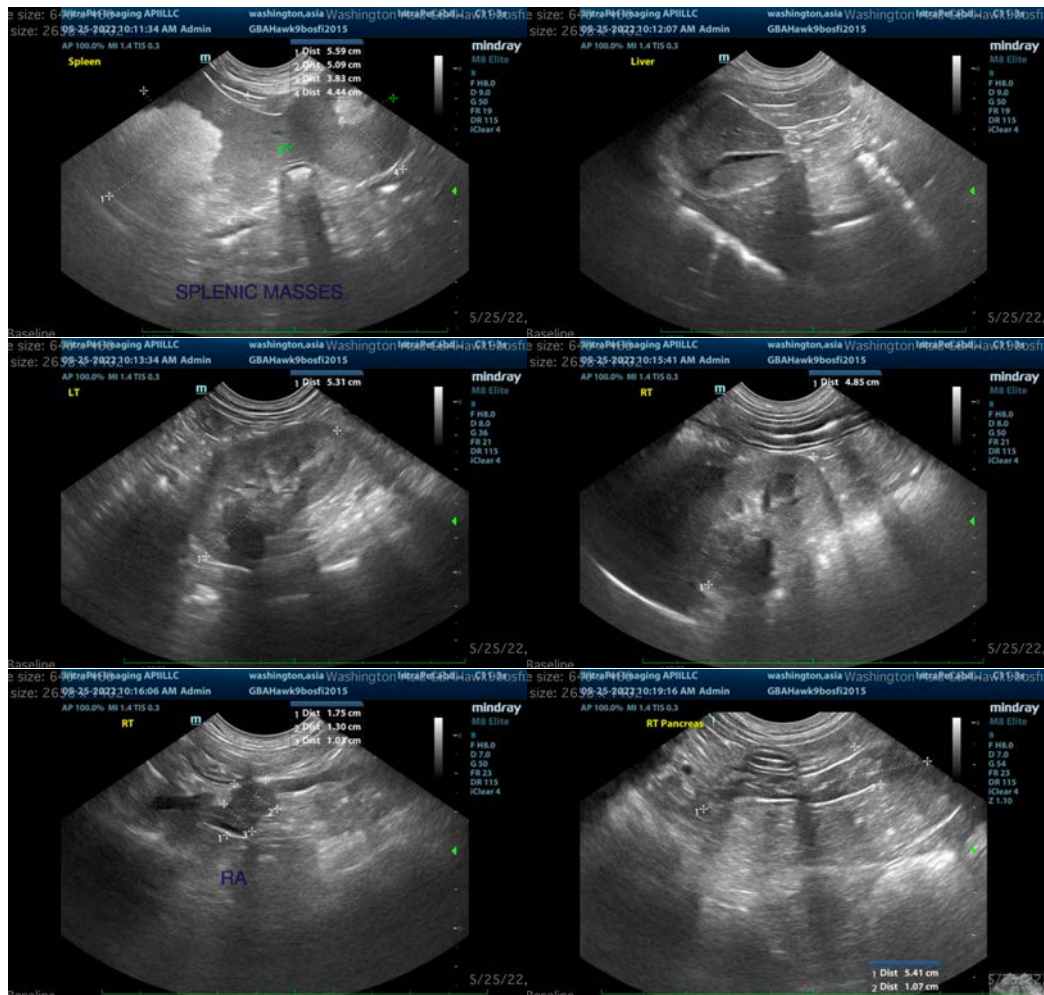
The pancreas appears somewhat prominent, and in the right limb, the duodenum appears somewhat thickened and irregular, and fluid dilated in the region of the pancreas with mild inflammatory changes. These findings could be consistent with mild pancreatitis.

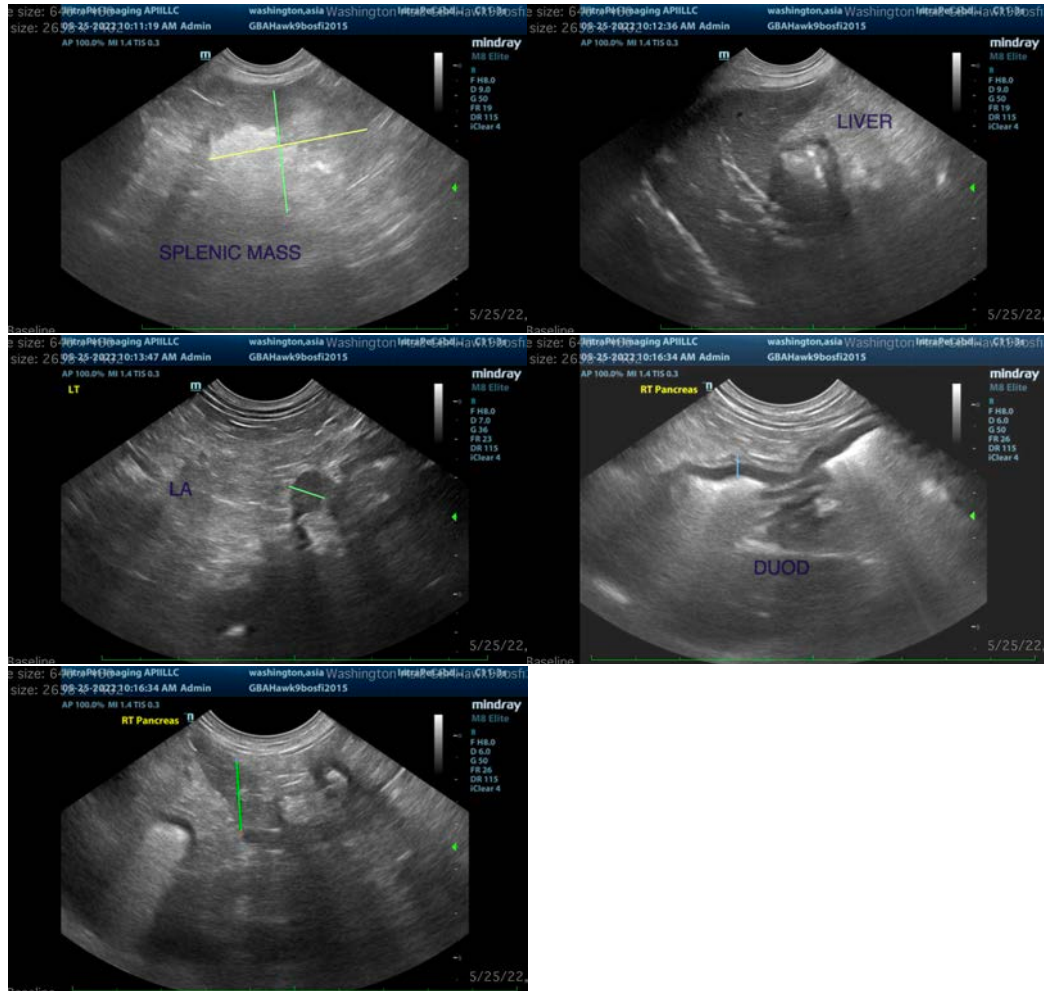
Additionally, there are two large solid splenic mass lesions. Some of the cranial abdominal inflammation could be secondary to these lesions. I could possibly associate the cranial abdominal pain with the mass lesions, but

the diarrhea and vomiting seem less likely (but could be possible). I suspect a splenectomy would be the most efficient evaluation of the spleen, as it would provide both diagnostic and therapeutic benefits, but use a clinical evaluation to decide whether to try and get this patient feeling better GI wise prior to considering surgery. Consider correlating with quantitative PLI levels, and a fine needle aspirate of the mass lesions could be considered if immediate surgical intervention is not desired.

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

Additionally, both adrenal glands appear prominent. Correlate this finding with clinical signs and the possibility for adrenal disease. If there are no current symptoms or biochemical abnormalities, then I would consider continued monitoring for symptoms and monitoring of the adrenal glands with ultrasound once the other medical issues have been dealt with.





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