**DATE PRESENTING CLINICAL SIGNS**

8.25.2022 Was in for annual, had 3 lumps aspirated. Ventral neck 1"x1"- mast cell. L axillary ½"x1/2"- mast cell. Buttock 1&1/4"x1&1/4"- unusual cells.

**PATIENT**

Piper Chrest

Current Medications: None.  
 Lab Results: See attached.  
 Radiographs: Lump on the spleen.  
 Date of Previous IntraPet Ultrasound: No previous.  
 Sedation: Not required to complete full diagnostic ultrasound.  
 Stat Report: Not requested.  
 Imaging Performed By: Andi Parkinson, BS, RDMS.

**SPECIES**

Canine

**BREED**

Pitbull

**SEX**

Spayed Female

**AGE**

8/11/2013

**WEIGHT**

88.2lbs

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

The **urinary bladder** wall is normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. The region of the trigone and the visible portion of the proximal urethra are normal.

The **left kidney** is normal in size (7.92 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. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

The **right kidney** is normal size (7.58 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

**INTERPRETED BY**

Andrea Nicastro, DMV,  
 Diplomate DACVIM  
 (Small Animal  
 Internal Medicine)

**Adrenal Glands**

The **left adrenal gland** is normal size (0.79 cm at cranial pole) (0.80 cm at caudal pole) (3.28 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.

The **right adrenal gland** is normal size (0.78 cm at cranial pole) (0.72 cm at caudal pole) (3.11 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**

Animal Medical Clinic  
 of Dulaney Valley

**REFERRING VET**

Dr. Chrest

**Spleen**

The **spleen** is subjectively normal in size overall with slightly irregular peripheral contours. A 3.00 cm irregular, isoechoic to slightly heterogenous mass is arising from the parenchyma. In addition, two smaller hypoechoic nodules are seen, one measuring 0.83 cm, the other measuring 0.46 cm in length. The remaining parenchyma is slightly mottled in appearance. Splenic vasculature appears normal with no evidence of thrombosis.

**INVOICE**

11495

**Liver**

The **liver** is subjectively normal in size with normal 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. Luminal contents are mostly anechoic. The cystic and common bile ducts are normal/not seen.

#### ***Gastrointestinal***

The **gastric lumen** is not distended. The gastric wall is normal in thickness with a normal layering pattern. The small intestinal lumen is segmentally dilated with gas. 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. There is no evidence of an obstructive pattern.

#### ***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.

#### ***Other***

A brief **echocardiogram** reveals no obvious evidence of pericardial effusion.

### **ULTRASONOGRAPHIC FINDINGS**

#### **Primary Findings**

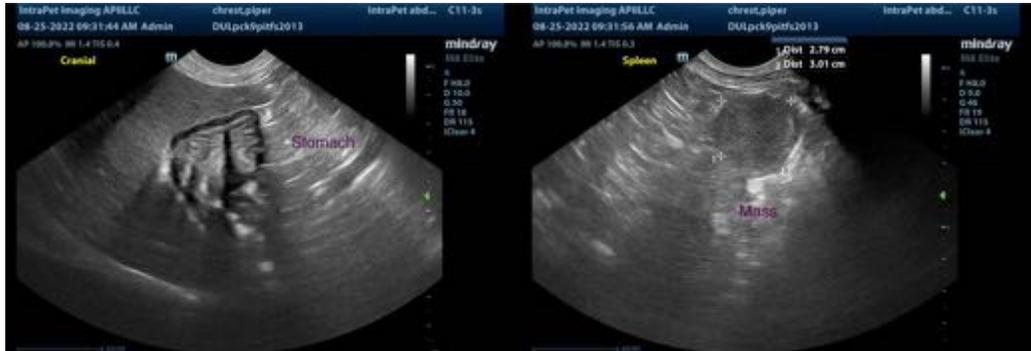
- Splenic mass with smaller nodules. Neoplasia (i.e., mast cell tumors, other) are of primary concern, with a lower possibility of benign pathology.
- The hepatic parenchymal changes are nonspecific and could be secondary to benign age-related changes (i.e., remodeling, regenerative nodular hyperplasia). However, infiltrative neoplasia (i.e., mast cell disease), cannot be completely excluded.

#### **Secondary Findings**

- Bilateral, degenerative renal changes with left dystrophic mineralization

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

- Three-view thoracic radiographs are recommended to assess for pulmonary metastatic disease.
- Fine-needle aspirates of the splenic mass can be considered if clotting status is appropriate. Twenty-five gauge-needles should be used. If pursued, the patient should be pre-treated with diphenhydramine 15 minutes prior to aspiration to help reduce the risk of mast cell degranulation.
- Consultation with a board-certified oncologist is recommended.



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.

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