



**PATIENT**

Izzy Marshaus

**SPECIES**

Canine

**BREED**

Labrador Mix

**SEX**

Spayed Female

**AGE**

9 years

**WEIGHT**

78.2 lbs

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING PERFORMED BY**

Dr. Kirk

**HOSPITAL NAME**

Shiloh AH

**REFERRING VET**

Dr. Kirk

**INVOICE**

31179

**DATE**

6/22/22

**PRESENTING CLINICAL SIGNS**

History: Recently had a mast cell tumor removed. Biopsy showed grade 2 low grade. Lab work was unremarkable. Ultrasound performed to screen for signs of internal spread. Lymph nodes palpate normally but upon shaving the abdomen there were three 3-4mm cutaneous swellings. One of them was abraided by the clippers and impression smear shows mast cells. CBC/Chem Unremarkable.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

Urinary bladder is adequately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Left kidney is normal is size (6.98 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Right kidney is normal is size (7.18 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

**Adrenal Glands**

Left adrenal gland is normal in size (0.45 cm at cranial pole and 0.46 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (1.0 cm at cranial pole and 0.48 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**Spleen**

Spleen is subjectively large in size with a mildly swollen but smooth capsule. Parenchyma is normal and homogenous in echogenicity and echotexture. No focal nodules or masses are observed. Splenic vasculature appears normal.

**Liver**

Liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.



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**Gastrointestinal**

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The visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

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The visible small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

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The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

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**Pancreas**

The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

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**Free Abdomen**

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There is no evidence of peritoneal effusion noted in these images. A small ovoid, hyperechoic lymph node is appreciated immediately adjacent to and medial to the spleen.

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DACVIM

**ULTRASONOGRAPHIC FINDINGS**

**PRIMARY FINDINGS:**

- Hypersplenism – can be associated with congestion caused by sedation (if sedated) but can also be associated with diffuse infiltrative disease. Both benign conditions such as extramedullary hematopoiesis, lymphoid hyperplasia, amyloidosis (leave amyloidosis out if canine) as well as infiltrative neoplastic diseases such as round cell neoplasia should be considered.
- Enlarged, hyperechoic lymph node adjacent to the spleen.
- This is concerning for infiltrative mast cell tumor given this patient’s history.

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

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1. Three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.
2. If the patient’s coagulation status is appropriate FNA of the spleen and enlarged lymph node if possible are recommended. Premedication with Diphenhydramine is recommended prior to the aspirate given the history of mast cell tumor.

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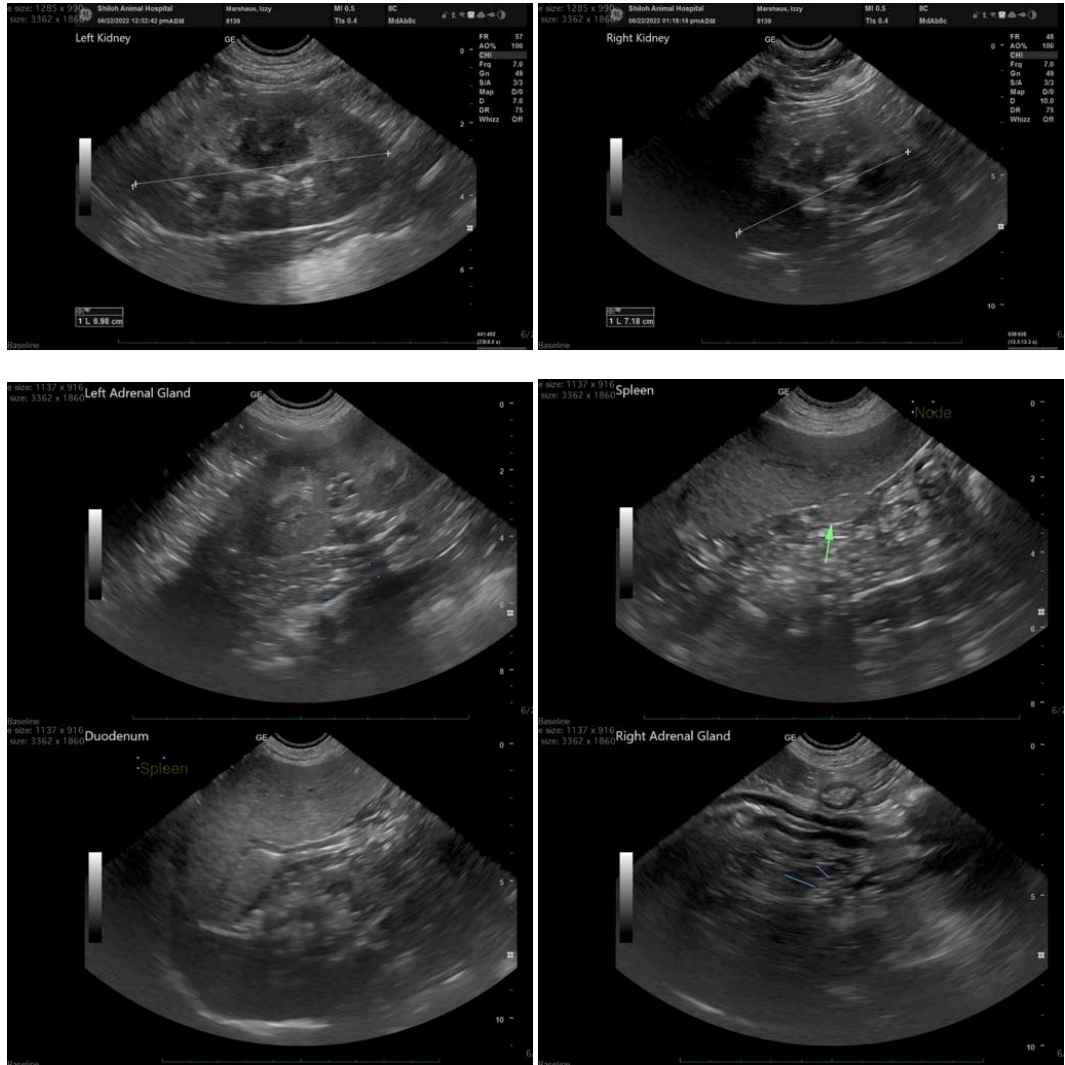
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

**Beth Johnson, DVM DACVIM**

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