



<b>PATIENT</b>	<b>PRESENTING CLINICAL SIGNS</b>
Steele Jazz	Client's concerns?: On Thursday, Jazz was not acting like himself. He usually follows O around but he did not want to do that. On Friday, he got a little worse. O's mom had to pick him up to take him outside. He has been lethargic and not wanting to eat his dog food. He will eat people food though.
<b>SPECIES</b>	Yesterday around 6am, O's mom noticed that he had blood in his urine. He urinated later on that day, and she noticed more blood in his urine. It was not noticed today, due to the rain. He possibly leaked urine in the house yesterday on a blanket. O's mom gave him one aspirin on Friday and another one on Saturday. O is unsure of the dosage, but knows that it was a small amount. Lives in rural area so would potentially have access to toxins/abnormal items. On exam: Significant weight loss. Quivering in the hind end. Current treatment: Gabapentin Amoxi/Clav i/d low fat but does not want to eat it currently
Canine	Was seen at MSU Emergency on 11/5/22: Jazz presented to MSU Emergency Service for persistent lethargy, intermittent episodes of right sided head tilt, dullmentation and disorientation, and misplaced footing. This has progressed since Monday. On presentation, Jazz was quiet, alert, and responsive. His heart rate, respiratory rate and temperature were normal. On physical exam, positional ventral strabismus of the right eye was appreciated, in which the position of the righteye deviated from the normal position with movement of the head. This is evidence of vestibular dysfunction. Nother abnormalities were appreciated on physical exam. Neurologic exam was otherwise unremarkable, with noother abnormalities noted. You elected to pursue full lab work. Jazz's complete blood count showed a mild, regenerative anemia (decreasedred blood cells) and evidence of infl ammation (increased white blood cells). Jazz also has an increased plateletcount. Jazz's chemistry panel revealed an elevated calcium value, which as discussed can be related to a variety ofcauses, including neoplasia. As discussed, Jazz's historical clinical signs and exam today are concerning for vestibular disease. His exam today was more consistent with peripheral vestibular signs, whereas his historical change in mentation and other signs noted at home are concerning for central vestibular disease. With concern for central vestibular disease, we recommend pursuing further diagnostic imaging (MRI +/- CSF) with a veterinary neurologist. At this time, you haveelected palliative care with steroid therapy and will follow up with your primary veterinarian for further care. Please discontinue the Gabapentin. Prednisone can be given two days after discontinuing Gabapentin, if clinicalsigns are persistent or worsening, and no further work up is elected to be pursued. Prednisone 10mg tablets: Give 1.5 tablets by mouth every 12 hours for 2 weeks then 1 tablet by mouth every 12hours until otherwise directed. This is a steroid medication that is used to treat infl ammation or suppress anoveractive immune system. **Common side effects include panting, increased drinking, increased urination (mayhave accidents in the house), and increased appetite. Please call IMMEDIATELY if you notice any dark/black stoolsor any coffee-ground vomit. Do NOT discontinue this medication without veterinary approval. Next dose due: Monday. 11/7/22 *As discussed - beginning this medication will potentially preclude any definitive diagnosis in the future, and may worsen his clinical signs* Meclizine 25mg tablets: Give 1 tablet by mouth to control motion sickness every 24 hours.
<b>BREED</b>	
Australian Shepherd	
<b>SEX</b>	
MN	
<b>AGE</b>	
9yr	
<b>WEIGHT</b>	
38lb	
<b>INTERPRETED BY</b>	
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	
<b>IMAGING PERFORMED BY</b>	
Chaley Hunt LVT	
<b>HOSPITAL NAME</b>	
Columbia Animal Clinic	
<b>REFERRING VET</b>	Abnormal PE/Chem/CBC/UA Results: CBC-Mild anemia, increased platelets, leukocytosis with neutrophilia and monocytosis. RBC-4.37 5.39 - 8.70 M/ $\mu$ L Hematocrit-33.6 38.3 - 56.5 % Hemoglobin-10.2 13.4 - 20.7 g/dL Reticulocytes-79 10 - 110 K/ $\mu$ L Reticulocyte Hemoglobin-24.3 24.5 - 31.8 pg WBC-26.5 4.9 - 17.6 K/ $\mu$ L Platelets-577 143 - 448 K/ $\mu$ L Chemistry: Potassium-3.9 4.0 - 5.4 mmol/L AST-263 16 - 55 U/L Bilirubin - Total 0.4 0.0 - 0.3 mg/dL Bilirubin - Conjugated 0.2 0.0 - 0.1 mg/dL Cholesterol 269 131 - 345 mg/dL Amylase-11,297 337 - 1,469 U/L Lipase->1,800 0 - 250 U/L Creatine Kinase-719 10 - 200 U/L The rest was normal. Urinalysis: Urine Protein: Creatinine Ratio 8.2 Collection FREECATCH Color AMBER Clarity TURBID Specific Gravity 1.025 pH 6.5 Urine Protein 3+ Glucose NEGATIVE Ketones NEGATIVE Blood / Hemoglobin 2+ Bilirubin 3+ Urobilinogen NORMAL White Blood Cells 0-2 Red Blood Cells 6-10 Bacteria NONE SEEN Epithelial Cells 2+ (3-5)/HPF Mucus NONE SEEN Casts OCC FINE GRANULAR (0-1)/LPF Crystals NONE SEEN Other NON-CRYSTALLINE DEBRIS PRESENT DEGENERATED RBC'S PRESENT T4 - normal
Dr. Engel	
<b>INVOICE</b>	
12120ag	
<b>DATE</b>	
11/09/2022	



**PATIENT**

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Steele Jazz

**Urinary System**

**SPECIES**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

Canine

**BREED**

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio and normal corticomedullary definition were maintained. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pelvic dilation. The left kidney measured 6.0 cm in length. The right kidney measured 5.9 cm in length.

Australian Shepherd

**SEX**

The area of the aortic trifurcation was free of pathology.

MN

The area of the iliac trifurcation was free of pathology including no evidence of medial, iliac or sublumbar lymphadenopathy.

**AGE**

The area of the residual prostate appeared normal and free of pathology although indistinctly visualized.

9yr

**WEIGHT**

**Adrenal Glands**

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.55 cm width at the caudal pole and 0.62 cm width at the cranial pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.60 cm width at the caudal pole and 0.61 cm width at the cranial pole.

38lb

**INTERPRETED BY**

**Spleen**

The spleen exhibited mild generalized enlargement with evidence of regional splenic folding. Generalized parenchyma heterogeneity including solitary to possible multiple coalescing variably echogenic to expansive mass/mass was present, an example measuring 3.4 – 7.0 cm in diameter. Regional non-uniform perisplenic hyperechoic mesentery and likely mild volume perisplenic free fluid vs subcapsular fluid accumulation was noted. Minor soft tissue echo present in the area of the splenic vein which may indicate splenic parenchymal expansion into the splenic vein vs emerging splenic vein thrombus.

R. McKenzie Daniel,  
DVM, DABVP  
(Canine and Feline)

**IMAGING PERFORMED BY**

Chaley Hunt LVT

**HOSPITAL NAME**

**Liver**

The liver was moderately enlarged with symmetrical capsule contour and generalized reduced parenchyma echogenicity exhibiting moderate coarse echotexture and evidence of remodeling. Mildly increased portal vascular borders were observed. No distinct hepatic masses/nodules were present.

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**REFERRING VET**

The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content with mild echogenic luminal debris. The cystic and common bile ducts were normal.

Dr. Engel

**INVOICE**

**Gastrointestinal**

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material.

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**DATE**

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material.

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Normal visible colon wall layers were present with apparent formed feces in lumen.

Steele Jazz

**Pancreas**

**SPECIES**

The parenchyma of the left limb, body and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease was evident.

Canine

**Free Abdomen**

**BREED**

No overt lymphadenopathy was present.

Australian Shepherd

**ULTRASONOGRAPHIC FINDINGS**

**SEX**

- Infiltrative splenic neoplasia pattern with variably echogenic to expansive potentially coalescing mass/masses, possible emerging non-obstructive splenic vein thrombus
- Hepatomegaly exhibiting non-homogeneous to hypoechoic parenchyma
- Regional perisplenic non-uniform hyperechoic mesentery and likely mild volume perisplenic effusion
- Sonographically unremarkable bilateral kidneys/urinary bladder

MN

**AGE**

9yr

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**WEIGHT**

Although potential for benign, reactive or inflammatory hepatic parenchymal changes and enlargement, concern for multicentric hepatosplenic neoplasia is warranted. Potential for regional perisplenic omental seeding cannot be excluded.

38lb

**INTERPRETED BY**

Assuming normal clotting status and using a 25g needle, a hepatosplenic FNA for screening cytology is warranted for further assessment. Three view chest radiographs and ideally brief sonographic assessment of the heart are recommended if not done to assess for occult thoracic pathology/metastasis. Pending additional diagnostics and dependent upon hepatic cytology and/or neurological status, laparotomy with splenectomy, gross inspection of the perisplenic omentum +/- hepatic biopsies could be considered. A guarded to very guarded prognosis is likely indicated.

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(Canine and Feline)

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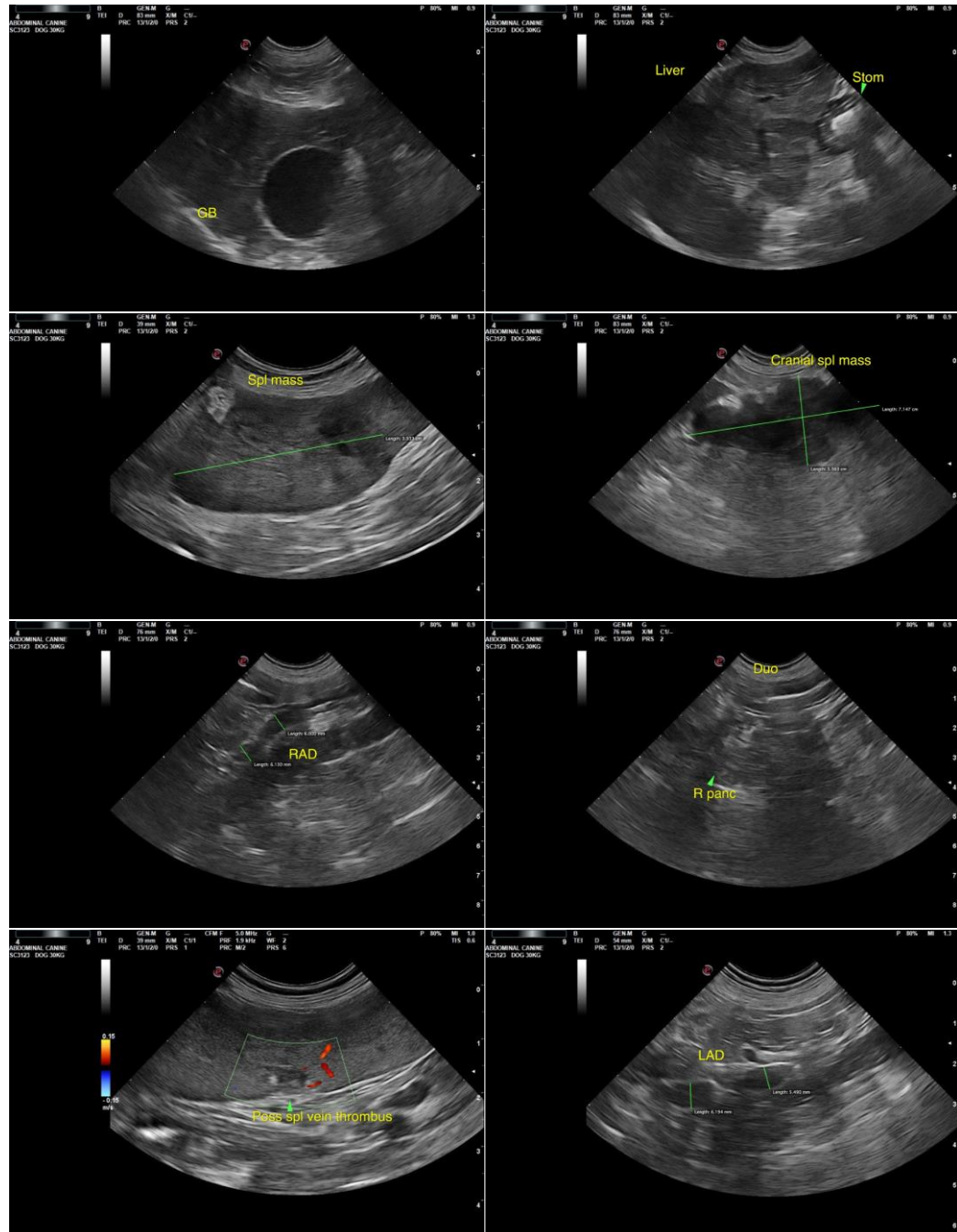
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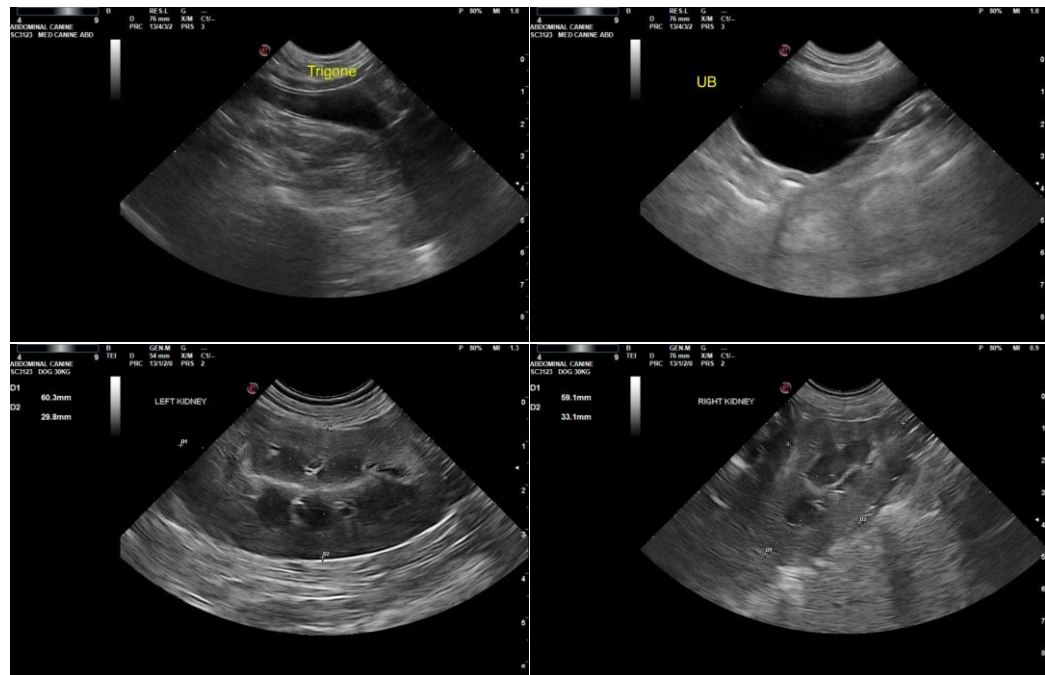
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

info@SonoPath.com