

**DATE**

2/11/22

**PRESENTING CLINICAL SIGNS**

Presenting Complaint: Tremors / Shaking / Trembling / Panting.

History: Date: 02-10-2022 Notes: Was normal this AM, eating normally Went for a walk later in the day - 30 minutes later: panting, trembling, wouldn't settle, and was trying to hide Owner noted that he looked like one of her other dogs that had bloat - abdomen was hard and when the owner touched the side he seemed painful

Assessments: Abdominal pain. Mass effect in the caudal abdomen.

Current Medications: Buprenorphine 0.6mg/mL, Amp/Sulb (Unasyn) 1.5gm Injection, Pantoprazole (Protonix) 40mg/vial Injection, and Buprenorphine 0.6mg/mL.

IDEXX In House Catalyst CHEM 17, Lytes, CBC

Analyzer: ProCyte\_Dx Analyzer Note: Monocytosis - Consider inflammation (if lymphopenia, consider glucocorticoid response). Low RETIC- HGB - Decreased iron availability (consider inflammation, iron deficiency, PSS, breed-related microcytosis). Reticulocytosis without anemia - Consider occult hemolytic or blood loss disease. Radiographs: Abdomen 2 View: Large mass effect in the caudal abdomen

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: STAT requested.

Imaging Performed By: Rachel Brillhart, RDMS.

**PATIENT**

Scooter Tighe

**SPECIES**

Canine

**BREED**

Basset Hound

**SEX**

Neutered male

**AGE**

2010

**WEIGHT**

59.6 lbs

**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 or masses. There is a small string of mildly shadowing hyperechoic debris in the dependent portion of the urinary bladder. This is most consistent with dependent sand debris.

The prostate is normal in size and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

**INTERPRETED BY**

Kathleen Sennello  
DVM, MS, Diplomate  
ACVIM (Small Animal  
Internal Medicine)

The left kidney has a normal shape and size (7.3 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.

The right kidney has a normal shape and size (7.24 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. Caudal to the right kidney is a large, irregular, mixed echogenic, largely hypoechoic and partially cystic mass effect towards the caudal pole of the right kidney. Direct attachment is not visualized. This mass has the appearance of a large clot or hemorrhage and measured > 7.46 cm. There is evidence of free fluid in the area.

**HOSPITAL NAME**

Animal Emergency  
Hospital

**REFERRING VET**

Dr. Nacke-Horney

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.78 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.

**INVOICE**

95989

The right adrenal gland is normal in size measuring 0.86 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.

### **Spleen**

The spleen is subjectively normal in size. The spleen echotexture is heterogenous and mottled, the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. There is a hypoechoic, focal mass effect in the cranial 2/3 of the spleen measuring 2.88 x 2.8 cm. This mass effect deviates the splenic capsule.

### **Liver**

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed. The gallbladder lumen is moderately distended. The wall of the gallbladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The findings are most consistent with an early developing mucocele. 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 relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. The duodenum measured as normal (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

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 normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

### **Free Abdomen**

There is a small volume of echogenic free abdominal fluid. There is no lymphadenomegaly. The omentum is of generally increased echogenicity.

### **Heart**

A small volume of pleural effusion is noted. Additionally the pleura is irregular and focal pleural nodules are visualized. One measured at 1.66 cm. There was no evidence of any significant pericardial effusion.

## **ULTRASONOGRAPHIC FINDINGS**

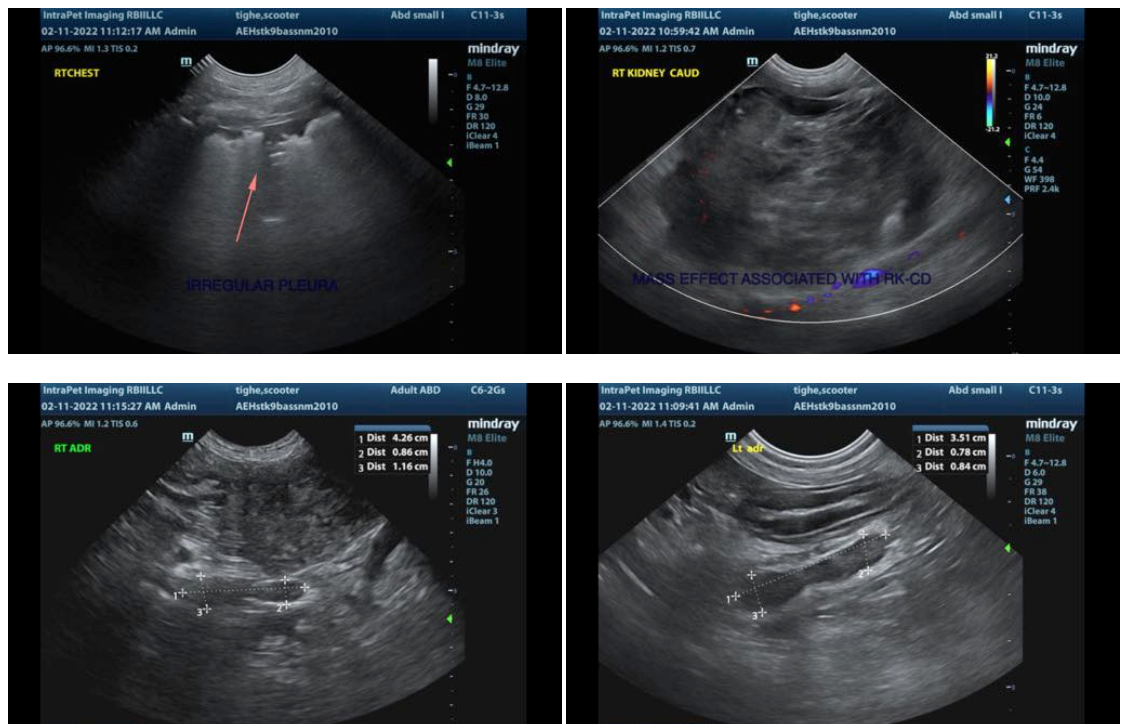
### **PRIMARY FINDINGS:**

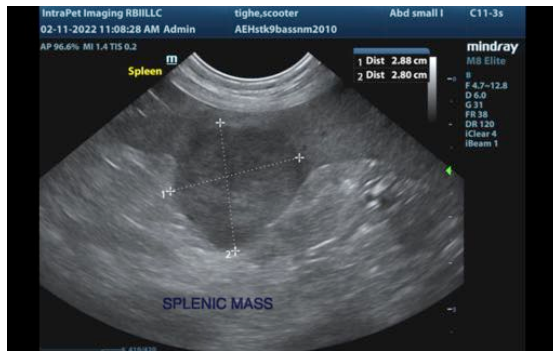
- Large, irregular, hypoechoic, mixed echogenic mass effect in the right caudal abdomen associated with the right kidney. This looks like an expansile mass with hemorrhage. Primary concern would be a hemangiosarcoma or a lesion associated with the right adrenal gland, (but this images as relatively normal).

- Hypoechoic splenic mass. A focal, solid, mixed echogenic mass is present within the splenic parenchyma. This mass distorts the splenic capsule. Differentials include benign lesions such as lymphoid hyperplasia, hemangioma, etc., or neoplastic lesions such as hemangiosarcoma, lymphoma, histiocytic sarcoma, etc.
- Early gallbladder mucocele. There is a large volume of sludge that is organizing in the gallbladder to form an early mucocele. There is no associated inflammation or fluid.
- Heterogenous liver. The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.
- Small/moderate volume of pleural and peritoneal effusion.
- Pulmonary/pleural nodules. The findings are concerning for metastatic disease.

### INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a large mass effect in the area caudal to the right kidney. Additionally there is a splenic mass and evidence of effusion and nodules within the thoracic cavity. These findings are highly concerning for a metastatic neoplastic process. Consider a FNA of the lesion caudal to the right kidney and the spleen. Additionally sampling of pleural and peritoneal fluid may be helpful with fluid analysis and cytology.







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.

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