

**DATE**

6/24/22

**PRESENTING CLINICAL SIGNS**

History: Monday, ate dinner, neighbor brought over dog and they were playing outside. Once Quinn came back inside, she vomited. Seemed okay, acting normal. O gave more food, ate. - Tuesday, ate about 1/2 of breakfast, seemed to have no appetite. Ate 4 kibbles of dinner, lethargic, laying around. - Wednesday (today), this am diarrhea small amount, soft serve consistency. Whimpered to go out, then vomited all food. Lip smacking, vomited again around mid day, slimy. Called rdvm, said to come here. - Not known to chew up toys or get into trash. - Unlikely to get into any toxins. - Not on any meds, only joint supplements. - Hx of GI signs in the past, nothing chronic. - Spayed and stomach is tacked

**PATIENT**

Quinn Mosley

**SPECIES**

Canine

**BREED**

Great Dane

**SEX**

Spayed Female

**AGE**

3/2/19

**WEIGHT**

112.5 Pounds

**INTERPRETED BY**

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

**HOSPITAL NAME**

Animal Emergency H

**REFERRING VET**

Dr. Thompson

**INVOICE**

16283

Current Medications: Benazapril, Furosemide, Metronidazole, Protonix, Buprenorphine, Ondansetron.

Lab Results: See attached.

Radiographs: Stomach full, poor abdominal detail, abdominal effusion

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

**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.

The left kidney has a normal shape and size (8.74 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 (6.38 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.

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.65 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.

The right adrenal gland is normal in size measuring 0.89 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/borderline large in size The spleen echotexture is heterogenous and mildly mottled, the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

**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. The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.

### ***Gastrointestinal***

The stomach contains minimal luminal contents and largely measures at a normal thickness. In the region of the pylorus there is a shadowing structure, measuring approximately 3.4 cm in width. The gastric wall in this area appears focally thickened and irregular, measuring at 1.6 cm. There is no severe gastric dilation indicative of an obstruction, but recent vomiting may have occurred. There is concern for a pyloric foreign body with secondary gastric wall thickening.

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 (0.59 cm) and the jejunum measured as normal (0.37 cm) 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/region of 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 moderate amount of free abdominal fluid. No lymphadenopathy and the omentum is of normal echogenicity.

### ***Other***

A brief view of the heart was submitted. No pericardial effusion was seen.

## **ULTRASONOGRAPHIC FINDINGS**

- Borderline large, mottled spleen. The diffuse splenic changes are non-specific and could be consistent with lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis. This is subjective and could be normal for this giant breed dog.
- Shadowing object visualized in the pylorus with adjacent gastric wall thickening. Findings are concerning for a foreign body with secondary gastric wall irritation.
- Moderate free abdominal fluid. Recommend fluid analysis and cytology.

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

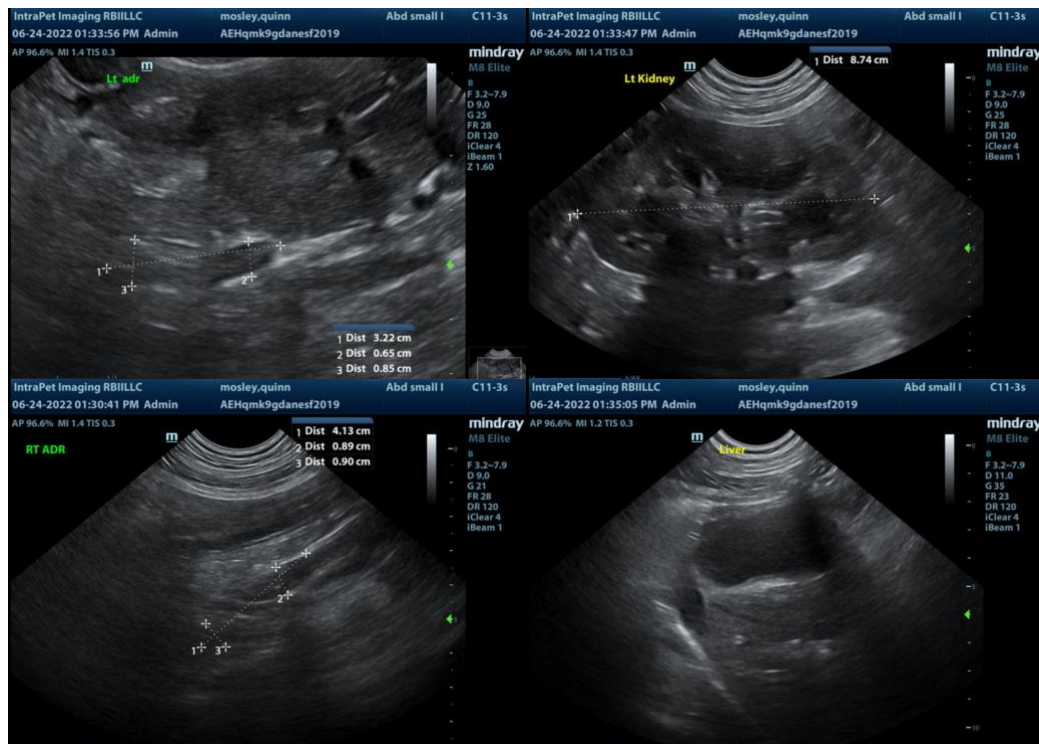
There appears to be a shadowing structure in the region of the pylorus. The stomach is not classically dilated as you would suspect with an outflow tract obstruction. So, this could be mobile, not fully obstructive, or there could have been a recent episode of vomiting, emptying the stomach. The gastric wall

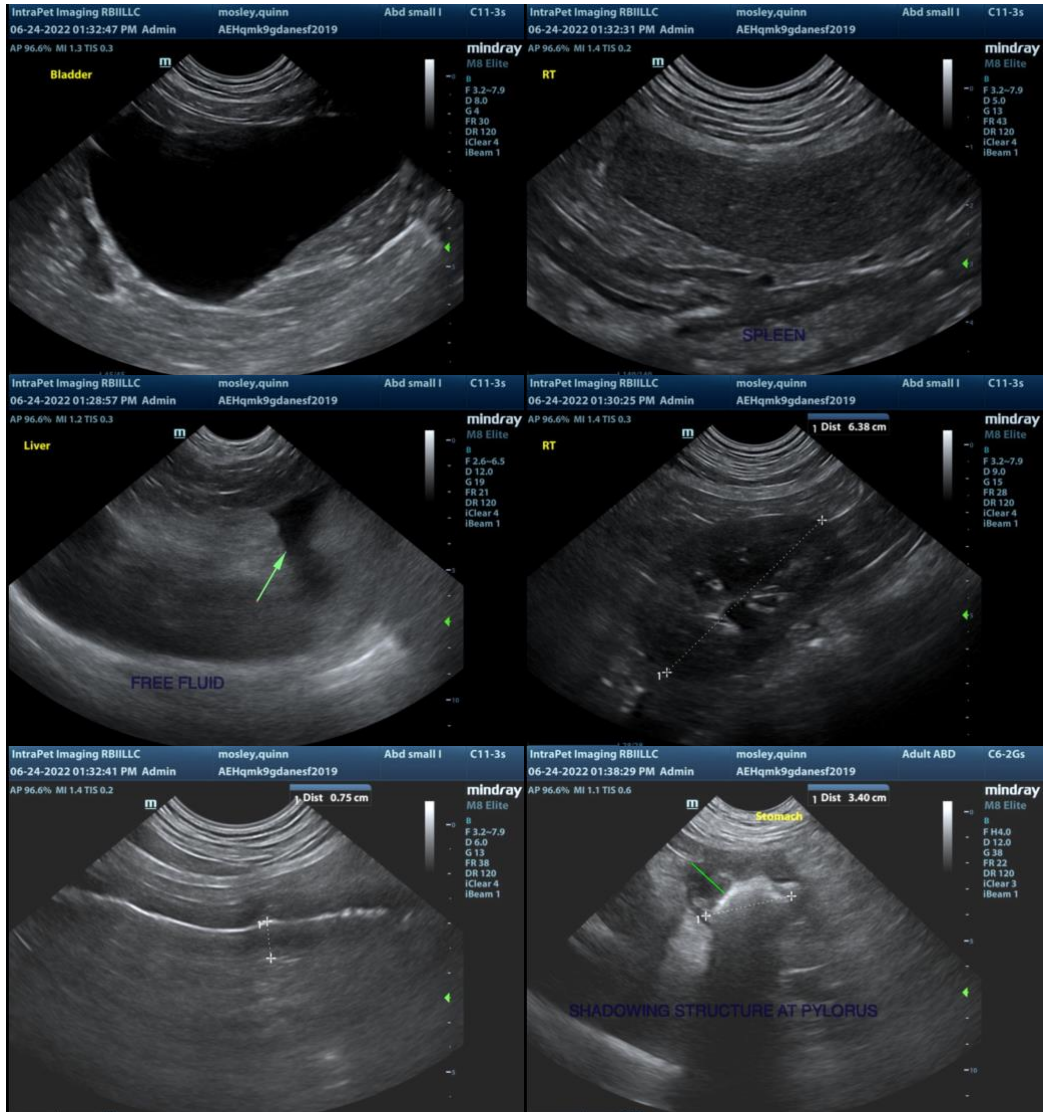
in the region of the shadow appears abnormal. The cause for the abdominal effusion is unclear. Consider possible peritonitis, heat stroke secondary to playing???, other? I recommend obtaining a sample for fluid analysis and cytology. Correlate these findings with a clinical picture and abdominal radiographs. Additionally, correlate these findings with lab work results, looking for possible causes of the effusion (low albumin, etc.). Options moving forward would be:

- Surgical explore with the intention to evaluate the gastric lesion, biopsy the wall and evaluate the remainder of the abdomen, taking samples as needed.
- Another option would be fluid analysis and cytology +/- culture with upper GI endoscopy. This has the benefit of being less invasive but could miss a perforating lesion, etc., if that's suspected?

The spleen appears subjectively large and possibly mottled. This can be difficult to tell in very large dogs who naturally have large spleens. Consider a fine needle aspirate if round cell neoplasia or underlying neoplastic process is suspected.

Due to the unusual nature of this case, I recommend three-view thoracic radiographs to look for effusion, etc. and you could consider a liver function test to look for the possibility of a shunt (seems unlikely). I suspect the best plan is exploratory to fully evaluate the gastric wall and small bowel, provided ancillary diagnostics and the clinical pictures support this.





**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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