

**DATE PRESENTING CLINICAL SIGNS**

5/31/22

Vomiting throughout the day- every 2-3 hours- initially food --> clear ucus --> brown/red discoloration - Decreased food intake and stool production Diet: nutro natures lamb and rice. According to Owner in room: last night ate 6-7 pm then started vomiting this am ate less then vomited up every 2-3 hours then vomiting food and mucus. O tried white rice, cheese, blueberries- not eating Tried pepcid- vomited up with food. Tonight 9pm vomited with blood/ brown material (not bright red or coffee grounds) DI?: None recently or that O knows of. Hx of DI in past 2 yrs ago ate advil- at hospital had liver elevations but resolved in few weeks with denamarin. Hx of eating trash out of bathroom in the past, does have access to this has eaten tissues in past Likes to eat underwear- no hx of ingestion recently 2 other dogs in household acting normally goes out in backyard, doesnt free roam. Defecation: This am normal, tonight small amount, straining, soft stool still drinking but less urinating normal. No hx of diet change- feeds diet + carrots, blueberries, rice, occasional milkbone No hx toxins Had rabies and distemper 1 week ago (vaccine).

**PATIENT**

Jaxx Esposito

**SPECIES**

Canine

**BREED**

Dachshund

**SEX**

Neutered Male

**AGE**

11/28/14

**WEIGHT**

19.2 Pounds

**INTERPRETED BY**

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MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**IMAGING PERFORMED BY**

Rachel Brilhart RDMS

**HOSPITAL NAME**

Animal Emergency  
Hospital

**REFERRING VET**

Dr. Kalwa

**INVOICE**

38103

**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. On one image, there is a very small focal irregularity in the urinary bladder measuring 0.29 cm x 1.17 cm, which could be an irregularity in the urinary bladder wall or a small amount of dependent debris. Recommend urinalysis and continued monitoring.

The visualized areas of prostate and surrounding tissue appear normal. Unfortunately, the prostate is not fully visualized likely due to its intrapelvic location. Correlate with rectal exam findings.

The left kidney has a normal shape and size (5.07 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 (5.31 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 0.52 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 0.42 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, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. There is a small hypoechoic nodule visualized within the parenchyma measuring 0.84 cm.

### ***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 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 is dilated with a large amount of fluid and irregular shadowing material most consistent with normal ingesta and gas. 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 layering is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

Visualization of the pyloric region is somewhat hindered by the large amount of shadowing material within the gastric lumen. No obvious foreign body or obstruction is noted, but needs to be considered.

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 prominent and hypoechoic as compared to the surrounding isoechoic 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 scant amount of free fluid visualized near the gallbladder. There are occasional prominent mesenteric lymph nodes visualized. One such mesenteric lymph node is measured at 0.69 cm. The omentum is generally of normal echogenicity.

### ***Other***

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

## **PRIMARY FINDINGS**

- Large distended stomach with shadowing intraluminal material and gas – correlate findings with abdominal radiographs and feeding history. If the patient was adequately fasted, then consider delayed gastric emptying or partial outflow tract obstruction.

- Small, hypoechoic nodule within the splenic parenchyma – There is a non-cavitated, hypoechoic splenic nodule visualized. Differentials include lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.
- Prominent, hypoechoic pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Mildly heterogeneous 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.

## SECONDARY FINDINGS

- Small area of mucosal irregularity visualized in the urinary bladder – The significance of this is unclear, as it is only visualized once and could also be consistent with some dependent debris. Recommend a urinalysis and repeat imaging in 6-8 weeks.

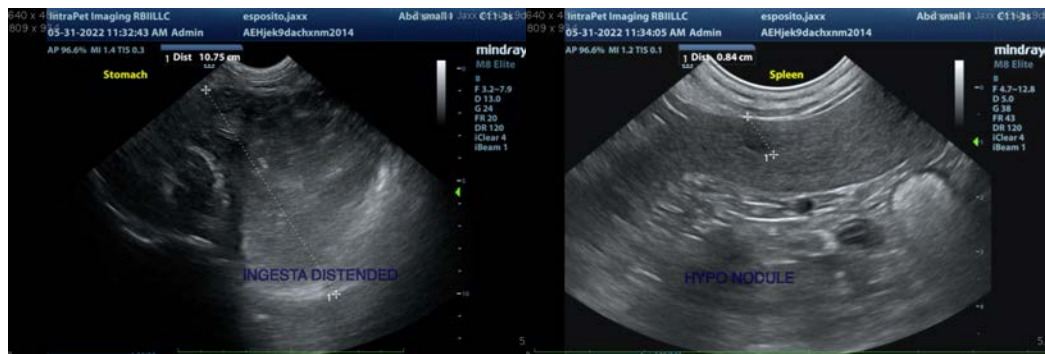
## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

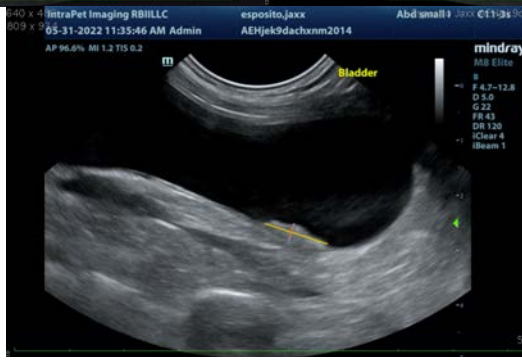
The stomach is significantly dilated with gas and shadowing material, which prevents visualization of some of the areas in the cranial abdomen. There is no evidence of a diffuse obstructive pattern, so if there is ingested material present, it would likely be within the stomach or proximal duodenum. Correlate with serial radiographs and fasting to confirm that the material passes and is not obstructive.

The pancreas is somewhat prominent, but not severely so. Correlate these findings with a quantitative PLI, and recommend treatment for acute gastroenteritis with pancreatitis.

The significance of the bladder lesion described is unclear. It could be an incidental finding, but repeat imaging and a urinalysis is recommended.

There is a small hypoechoic nodule visualized in the spleen. This could represent benign or neoplastic lesion. Recommend a fine needle aspirate and 3-view thoracic radiographs.





**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.

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