

**DATE PRESENTING CLINICAL SIGNS**

1/5/23

**PATIENT**

Titan Chamberlain

Intermittent vomiting and regurgitation for several years, especially after drinking water. Has been increasing in frequency to 1-2 times per week. Recently presented for 4 days of "regurgitation". X-rays showed distended stomach with settling opacities. Pattern resolved on x-rays 48 hours later and pet improved with oral cerenia at home.

**SPECIES**

Feline

Current Medications: cerenia 12 mg SID x 3-4 d total.

Lab Results: mild ALT elevation.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: IM sedation.

Stat Report: Not requested.

**BREED**

Bengal

Imaging Performed By: Rachel Brillhart, RDMS.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****SEX**

Neutered Male

**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.

**AGE**

2/26/19

The left kidney has a normal shape and size (3.74 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**WEIGHT**

10.5 Pounds

The right kidney has a normal shape and size (3.97 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

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

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.31 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.

**HOSPITAL NAME**

Everhart Vet Hospital

The right adrenal gland is normal in size measuring 0.46 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.

**REFERRING VET**

Dr. Notarangelo

**Spleen**

The spleen is subjectively normal in size (0.95 cm), 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 structure associated with the caudal portion of the spleen, which I suspect is an omental cyst, cystic lymph node, etc., but a hypoechoic structure associated with the spleen cannot be ruled out. Recommend continued monitoring.

**INVOICE**

43973

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

### ***Gastrointestinal***

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.36cm 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. Jejunum wall measures 0.24 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. Colon wall measures 0.11 cm.

### ***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***

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There are visible mesenteric lymph nodes measuring 0.30 cm and 0.37 cm.

### ***Other***

There is a hypoechoic structure with no evidence of blood flow on color doppler, measuring 1.04 cm x 0.56 cm, adjacent to the spleen. This could represent a benign omental cyst, less likely a splenic lesion, or a cystic lymph node, but continued monitoring is warranted.

## **ULTRASONOGRAPHIC FINDINGS**

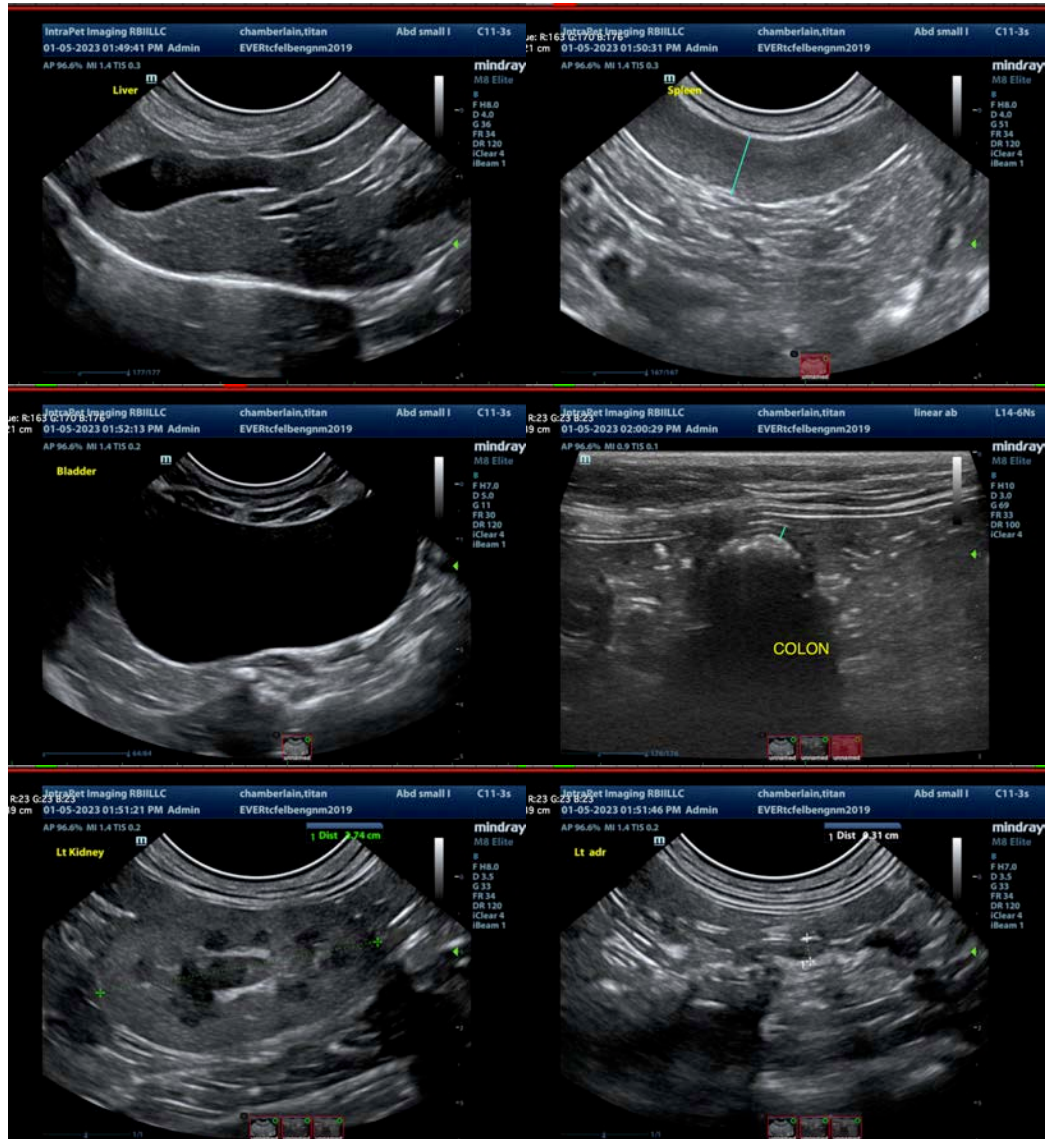
- Small anechoic/hypoechoic structure visualized associated with the spleen – I suspect this is an omental cyst, cystic lymph node, etc., but continued monitoring is warranted, as a splenic lesion cannot be definitively ruled out.
- Visible mesenteric lymph nodes – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

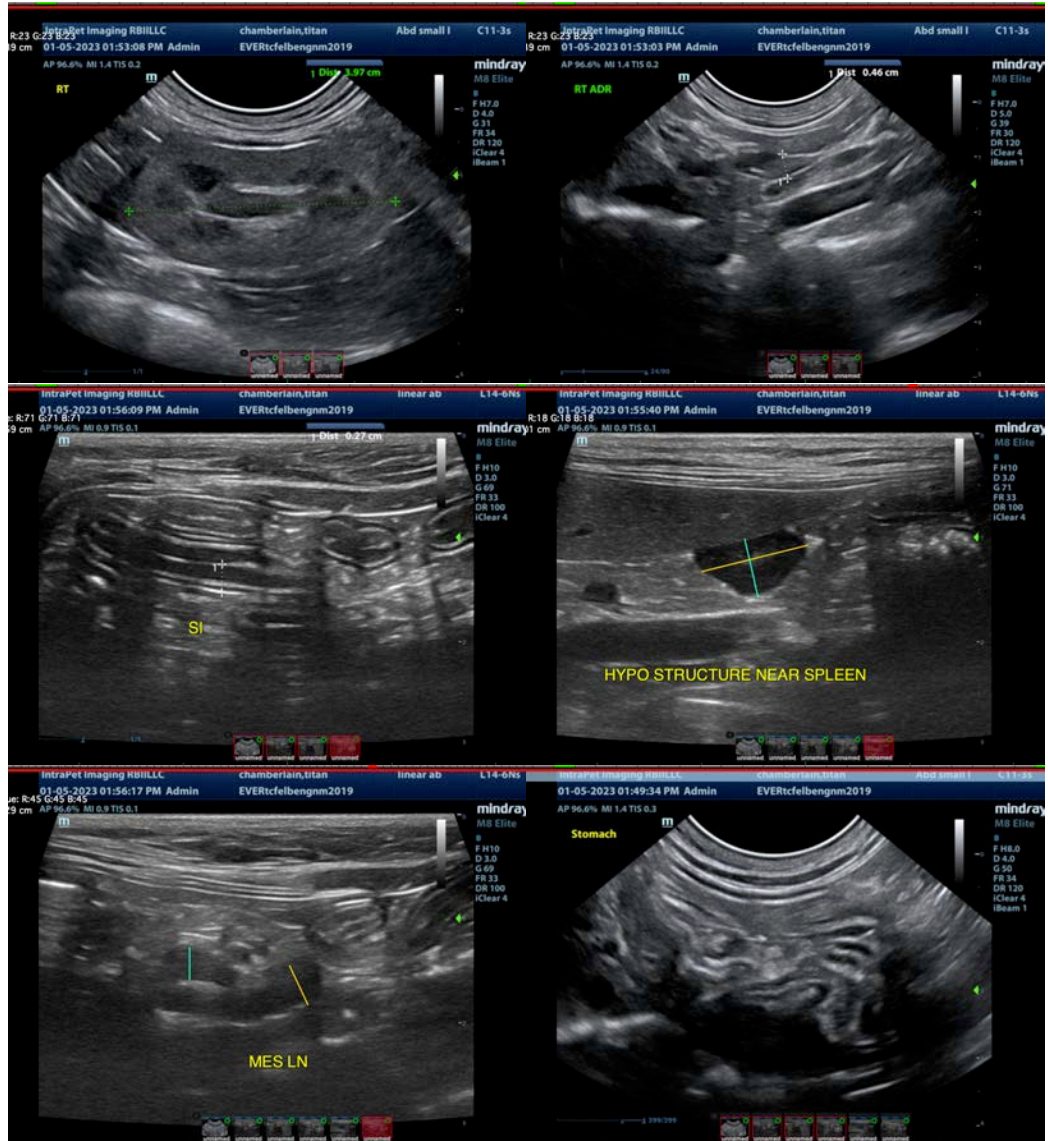
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The findings on today's scan are likely unrelated to the symptoms described. The nature of the hypoechoic structure near the spleen is somewhat uncertain, but I suspect it is cystic and benign, although continued monitoring is warranted, as a primary splenic lesion cannot be definitively ruled out. If an angle for sampling could be obtained, this could be an option. The lymph nodes noted are likely within normal limits.

The stomach is empty and there are no abnormalities visualized associated with the outflow tract. If not already done, recommend 3-view thoracic radiographs to evaluate the esophagus and thorax. Additionally, you could consider a swallow barium study to evaluate the passage of material through the esophagus, and follow that material over time in the stomach, trying to assess how long it takes to pass. Additionally, a fluoroscopic barium swallow could be very helpful, looking at transit time, motility, etc.

An upper GI endoscopy would be helpful to look at the esophagus and the outflow tract in the stomach, looking for narrowing, strictures, etc. to try and determine if this is a functional or an anatomic problem. Generalized ileus can occur with underlying gastrointestinal disease, but there was no evidence of small intestinal ileus on today's scan. You could consider a GI panel to Texas A&M for a qualitative fPLI, TLI, cobalamin and folate to get a feel for the general gastrointestinal health.





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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