

**DATE PRESENTING CLINICAL SIGNS**

3/15/23

Patient has been having intermittent vomiting for the past month, with some worsening in the last 2 weeks. Two weeks ago she vomited 6 times in a single day - some undigested food and some bile. No diarrhea, no vomiting since then until yesterday when she vomited bile and then ate food and vomited the food. E/d well, normal energy levels. Owner had a previous, related Wheaten die at age 6 or 7 of GI neoplasia and would like AUS to determine if there is any signs of early neoplasia to account for current symptoms. Usually eats Castor and Pollux lamb and oatmeal, recently switched to Purina ProPlan lamb and oatmeal. No known ingestion of food outside her diet or any FB; she is closely monitored even when outside.

PATIENT

Schoggi Morgan

SPECIES

Canine

BREED

Wheaten Terrier

Current Medications: None listed.
 Date of Previous IntraPet Ultrasound: No previous.
 Sedation: Not required to complete full diagnostic ultrasound.
 Stat Report: Not requested.
 Imaging Performed By: Andi Parkinson, BS, RDMS.

SEX

Spayed Female

AGE

4/28/18

WEIGHT

34.2 Pounds

INTERPRETED BY

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 Medicine)

HOSPITAL NAME

Frederick Road VH

REFERRING VET

Dr. Flynn

INVOICE

45923

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder is mildly distended with echogenic urine. There is a large volume of dependent hyperechoic shadowing material visualized within the dependent portion of the urinary bladder, most consistent with a large volume of sandy debris/small stones. Some of these are suspended. The area of the trigone, ureteral papillae and proximal urethra do not show any evidence of mass effects, but the sandy debris is distributed throughout the bladder.

The left kidney has a normal shape and size (4.4 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.

The right kidney has a normal shape and size (4.3 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.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.33 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 0.41 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. 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 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 <0.7cm 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. Jejunum wall measures 0.43 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 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, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

ULTRASONOGRAPHIC FINDINGS

- Large volume dependent and suspended mineralized/sandy debris and small stones – Recommend free catch urinalysis and urine culture and sensitivity.
- Borderline thickening of the small intestine – The mild small intestinal wall changes may be a normal variant in this patient or could be consistent with an inflammatory process (e.g., inflammatory bowel disease).

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No focal lesions are visualized associated with the gastrointestinal tract to explain the vomiting reported. The small bowel does appear somewhat “ropey” and mildly prominent/thickened for a dog of this size, but this is very subjective. Unfortunately, there are many causes for chronic intermittent vomiting, which cannot be definitively diagnosed by ultrasound.

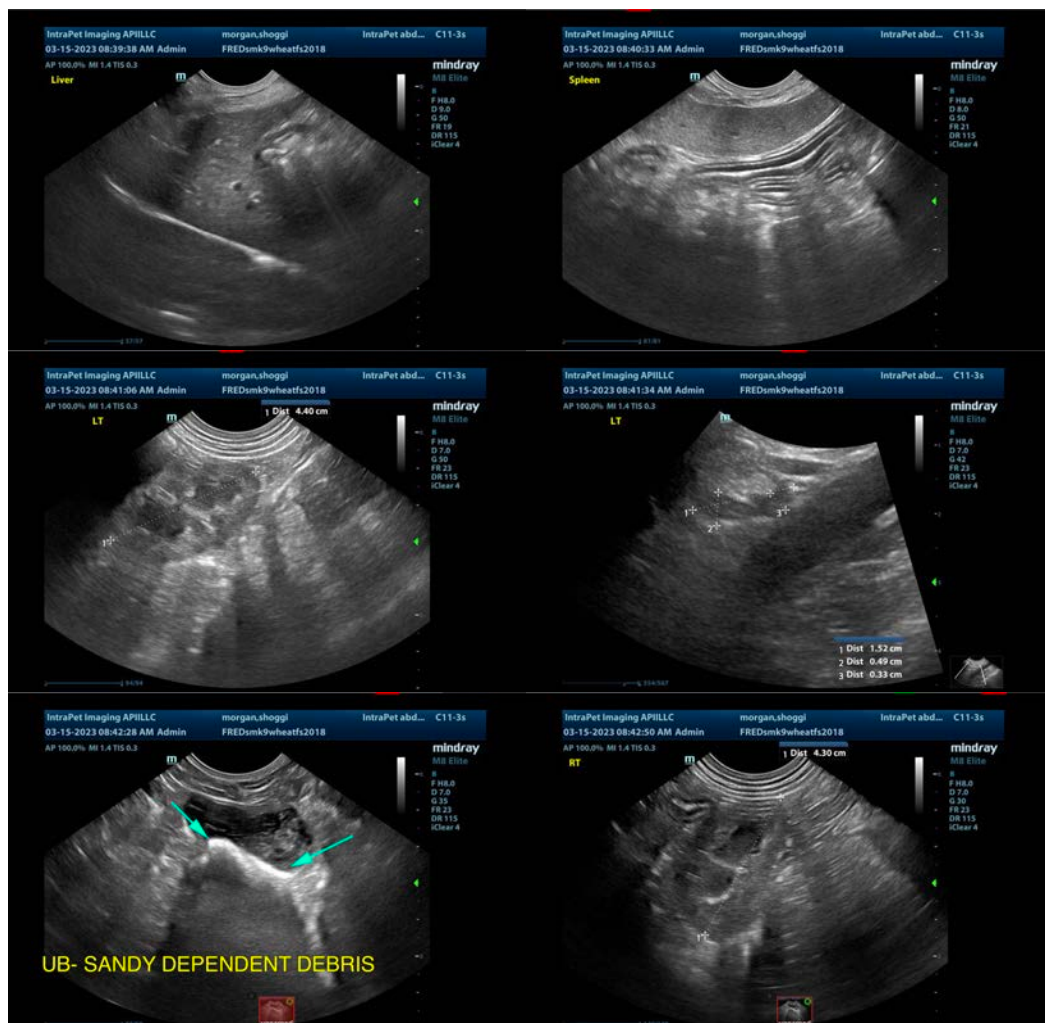
Consider metabolic causes including Addison’s disease. Recommend full bloodwork and either an ACTH stimulation test or a baseline cortisol.

If lab findings are normal and systemic disease is thought unlikely, consider primary gastrointestinal causes.

Consider such differentials as food allergy/dietary intolerance, GI parasitism, chronic pancreatitis, IBD and less likely neoplasia, etc..

- Consider a novel protein/hydrolyzed protein diet (exclusively at least 4-6 weeks)
- Consider a GI panel to Texas A&M for evaluation of B12 levels, folate, PLI/TLI etc.. to further evaluate for pancreatic/small intestinal disease.
- Recommend chronic pre- and probiotic therapy.
- Correlate findings with thoracic and abdominal radiographs, looking for any evidence of esophageal disease, concurrent thoracic disease, etc.
- If symptoms persist, consider obtaining GI biopsies.

There is a large volume of dependent hyperechoic shadowing sandy debris and suspended sandy debris/small stones. Recommend a free catch urinalysis in hopes of obtaining some of the sediment for analysis. Additionally, recommend a urinalysis and culture. At this time, most of the debris appears small enough to pass, but this could progress to become a more significant problem.





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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