**PATIENT**

Penny Musick

SPECIES

Canine

BREED

Chihuahua Mix

SEX

FS

AGE

3 years

WEIGHT

15.8 lbs.

INTERPRETED BYR. McKenzie Daniel,
DVM, DABVP (Canine
and Feline)**IMAGING
PERFORMED BY**

Amy Mayhew LVT

HOSPITAL NAME

SVS Imaging MI

REFERRING VET

Dr. Foster

INVOICE

16262

DATE

2/22/23

PRESENTING CLINICAL SIGNS

Current Medications: Entyce 0.6ml PO SID, Ondansetron 4mg 1/4 tab PO BID-TID; bland diet

Patient History: Has had 2 episodes of vomiting with gagging, licking objects, salivating over the past month. The first episode occurred when the owners were out of town, when they returned home she had eaten part of a rug and vomited that up. The second episode occurred 2.16.23, same symptoms but vomited bile. Blood work at the time was normal. Went to the emergency clinic for inappetence, and was treated symptomatically with an injection of Zofran. When we called for an update on 2.20.23 and the patient had vomited up more pieces of rug on 2.19.23 and continued inappetence. Rec abdominal ultrasound to r/o additional foreign material v gastroenteritis, pancreatitis. Abnormal PE/Chem/CBC/UA Results: Normal PE.

2/22/23: The patient reportedly ate last evening but did not eat this morning.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

The area of the aortic trifurcation was free of pathology.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio and normal corticomedullary definition were maintained. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pelvic dilation. The left kidney measured 4.2 cm in length. The right kidney measured 4.3 cm in length.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.52 cm width at the caudal pole and 0.34 cm width at the cranial pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.53 cm width at the caudal pole and 0.43 cm width at the cranial pole.

Spleen

The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

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Liver/ Gallbladder

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal.

Gastrointestinal

The stomach presented intact mildly prominent wall layering with moderate, likely retained ingesta present. The ingesta primarily exhibited variable hyperechogenicity and nonshadowing, although focal areas of nonspecific ingesta shadowing or small echoes within the gastric body and pylorus lumen were present. No evidence of mechanical pyloric outflow obstruction was noted. An example of a shadowing gastric ingesta vs. echo measured 1.0 cm in diameter.

The small intestine presented intact sonographically normal wall layering. Segments of the likely upper to mid intestine exhibited strongly shadowing mild irregular luminal ingesta to echoes with an example of a shadowing ingesta to echo measuring 3.7 cm in diameter. Focal shadowing duodenal ingesta / echo measured 1.0 cm in diameter. Concurrent segments of small intestine without ingesta or echoes were also present. No definitive intestinal obstructive pattern was noted.

Normal visible colon wall layers were present with apparent formed fecal matter in lumen.

Pancreas

The parenchyma of the left limb, body, and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease were evident.

Free Abdomen

Intermittent mesenteric lymph nodes were present. These lymph nodes were homogenous, mildly hypoechoic and smoothly margined. A normal width: length ratio was maintained (<0.5). Evidence of perilymphatic inflammation was evident. An example of lymph node size was 2.7 cm x 0.59 cm. No evidence of peritoneal free fluid was noted.

ULTRASONOGRAPHIC FINDINGS

- Moderate focally shadowing retained ingesta
- Segmental small intestinal strongly shadowing ingesta / echoes with concurrent segments of empty small intestine, no definitive obstructive pattern
- Intermittent subjective benign / reactive mesenteric lymphadenopathy - suspect reactive hyperplasia or lymphadenitis
- Sonographically normal pancreas

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The strongly shadowing segmental small intestinal ingesta / echoes, as well as areas of shadowing gastric ingesta, are strongly suggestive of nonobstructive potentially passing foreign material in conjunction with the patient history and gastrointestinal signs. Some degree of concurrent metabolic

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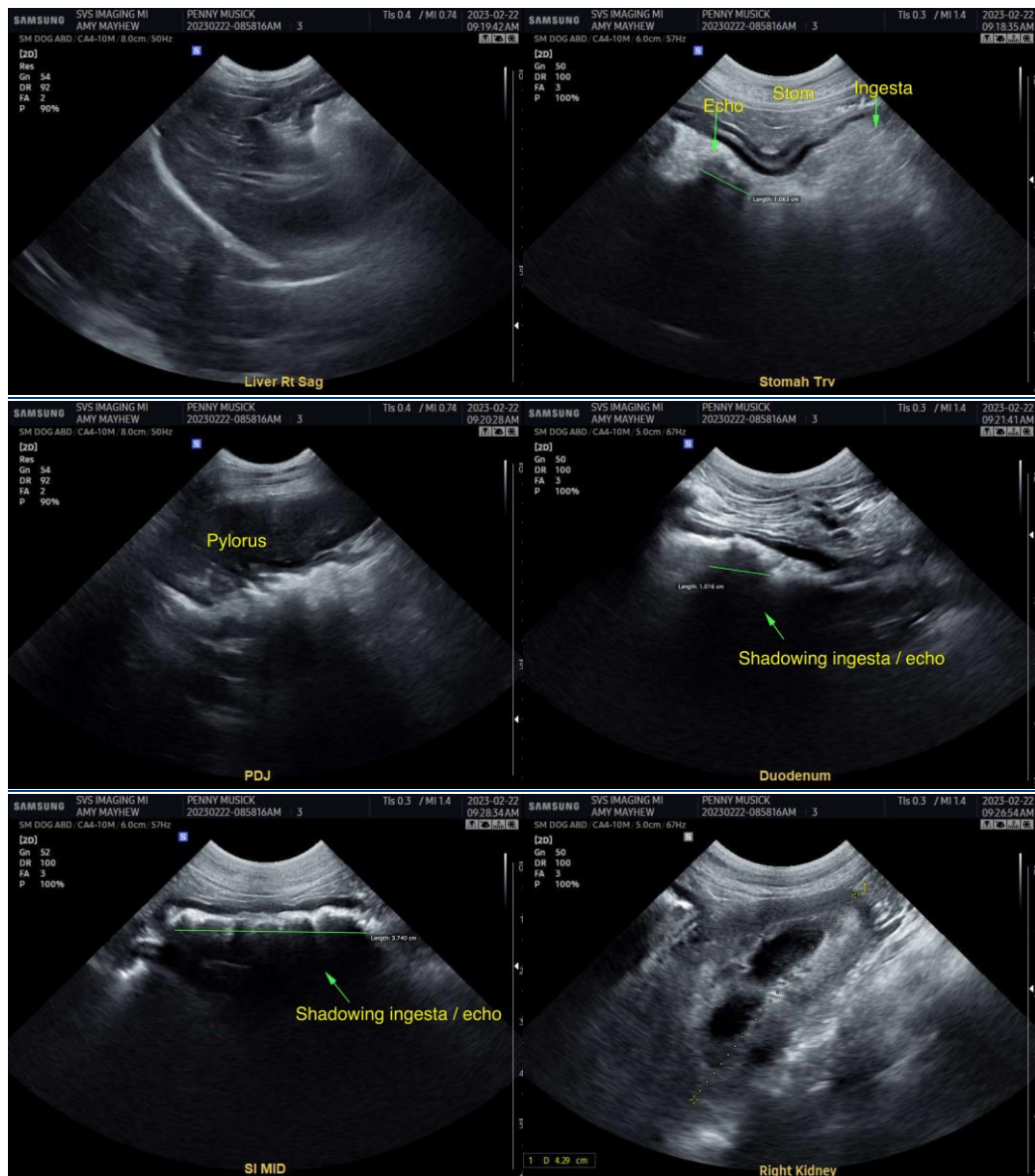
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or functional gastric hypomotility is possible without definitive evidence of mechanical pyloric outflow obstruction.

Given this presentation in conjunction with concern for possible future obstruction, exploratory laparotomy with expectation toward enterotomy +/- gastrotomy and with gastrointestinal biopsies (considered essential despite exploratory findings), to assess for underlying intestinal disease as a potential cause of Pica is warranted. Hospitalization with IV fluids, gastrointestinal support, and close sonographic monitoring of the shadowing intestinal and potential gastric echoes for evidence of persistent or continued passing would be a more conservative approach. However, given this presentation in conjunction with the patient history and gastrointestinal signs, surgery is recommended.



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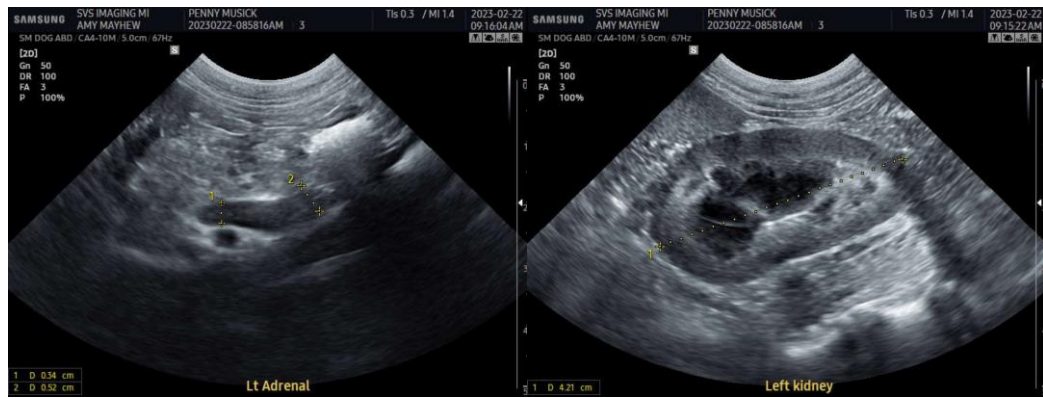
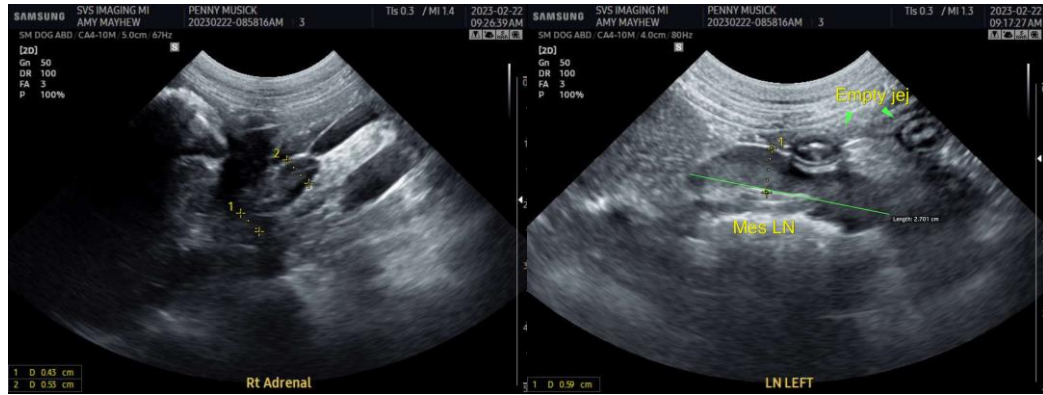
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)
info@SonoPath.com