



**PATIENT**

Ivy Detberner

**SPECIES**

Canine

**BREED**

Golden Retriever

**SEX**

Intact Female

**AGE**

10 Years

**WEIGHT**

28 kg

**INTERPRETED BY**

R. McKenzie Daniel,  
DVM, DABVP  
(Canine and Feline)

**IMAGING PERFORMED BY**

Patti Mayfield, DVM

**HOSPITAL NAME**

East Bend AH

**REFERRING VET**

Jamie Thurk, DVM

**INVOICE**

20620

**DATE**

1/19/23

**PRESENTING CLINICAL SIGNS**

History: Vomiting and anorexia since 1/16/23. Uncertain if D present. Patient received SQF and Cerenia on 1/18- is still refusing food, but no additional vomiting

Abnormal PE/Chem/CBC/UA Results: PE : cranial abdominal pain, mild tartar Rads (2 view abdomen): Mild gas distention of stomach, no obvious masses or FB Single view thorax: NSF CBC: WBC: 19,780 (H) PMB: 17,060 (H) CHEM: BG: 148 (H) K: 3.1 (L) Na: 108 (L)

**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 were noted. Aortic trifurcation was normal.

No overt pathology associated with the uterus or bilateral ovaries.

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 6.0 cm in length. The right kidney measured 6.8 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 2.3 cm length x 0.50 cm width at the caudal pole.

The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 2.0 cm length x 0.65 cm width at the caudal 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.

**Liver**

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 exhibited intact overtly normal wall layering. The stomach exhibited marked dilation with retained primarily anechoic fluid, extending into the pyloric outflow. Minor concurrent retained nonshadowing gastric chyme was present.



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The small intestine exhibited strongly shadowing mild irregular hyperechoic luminal echo to suspected multiple echoes, exhibiting strong distal acoustic shadowing. An example of intestinal echo measured 4-5 cm in diameter. Concurrent linear-like hyperechoic echo was noted in the segmental small intestine with associated secondary segmental plication and mild retained intestinal luminal fluid consistent with mild to partial obstructive pattern. The affected intestinal segments appear to be mid abdomen. Concurrent segments of sonographically unremarkable small intestine, exhibiting intact wall layering without evidence of mechanical/metabolic ileus were also visualized.

Normal visible colon wall layers were present with apparent formed feces 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 was evident.

***Free Abdomen***

No evidence of significant lymphadenopathy. No evidence of peritoneal effusion or overt peritonitis was present. Generalized subjective normal omental echogenicity was present.

**ULTRASONOGRAPHIC FINDINGS**

- Marked gastric distention with retained primarily anechoic fluid and mild nonshadowing chyme
- Pyloric or upper/mid small intestinal foreign body/bodies with concurrent segmental linear component, secondary segmental intestinal plication and segmental partial intestinal obstructive pattern. Sonographically unremarkable empty small intestine, subjectively distal to the intestinal foreign body/bodies and segmental plication.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Exploratory laparotomy with expectation toward enterotomy/enterotomies and potential gastrotomy recommended. No obvious evidence of intestinal perforation. The small intestinal walls exhibited primarily intact yet mildly inflamed wall layer detail, specifically in the area of the intestinal plication without overt evidence of neoplastic criteria, which is considered unlikely. However, the possibility of underlying intestinal disease as a potential cause of pica cannot be definitively excluded. Intestinal biopsies at the time of surgery may be considered. Potential resection and anastomosis may be indicated pending gross inspection of the intestinal tract. Ovariohysterectomy is suggested at the time of surgery. Guarded prognosis indicated.



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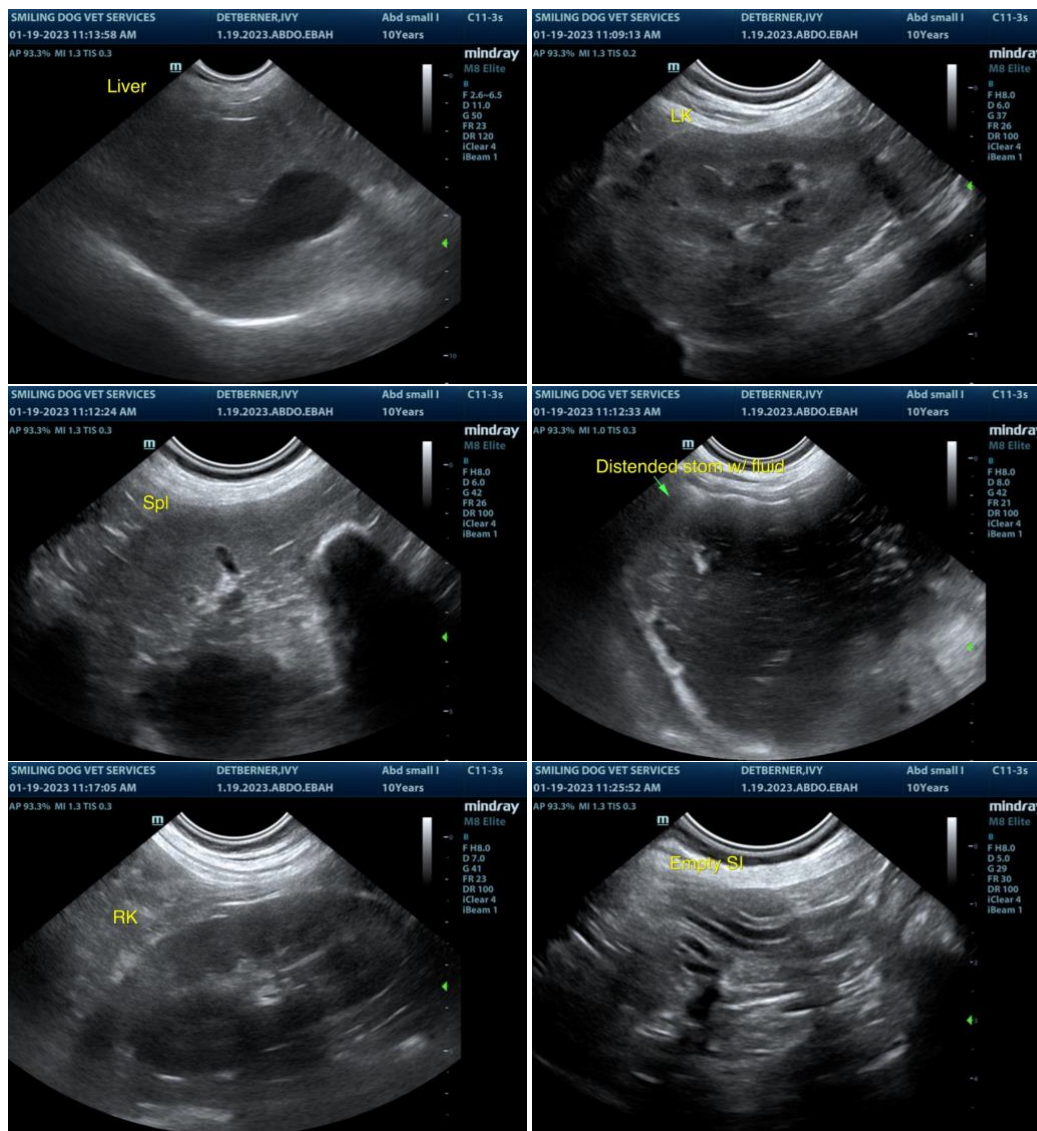
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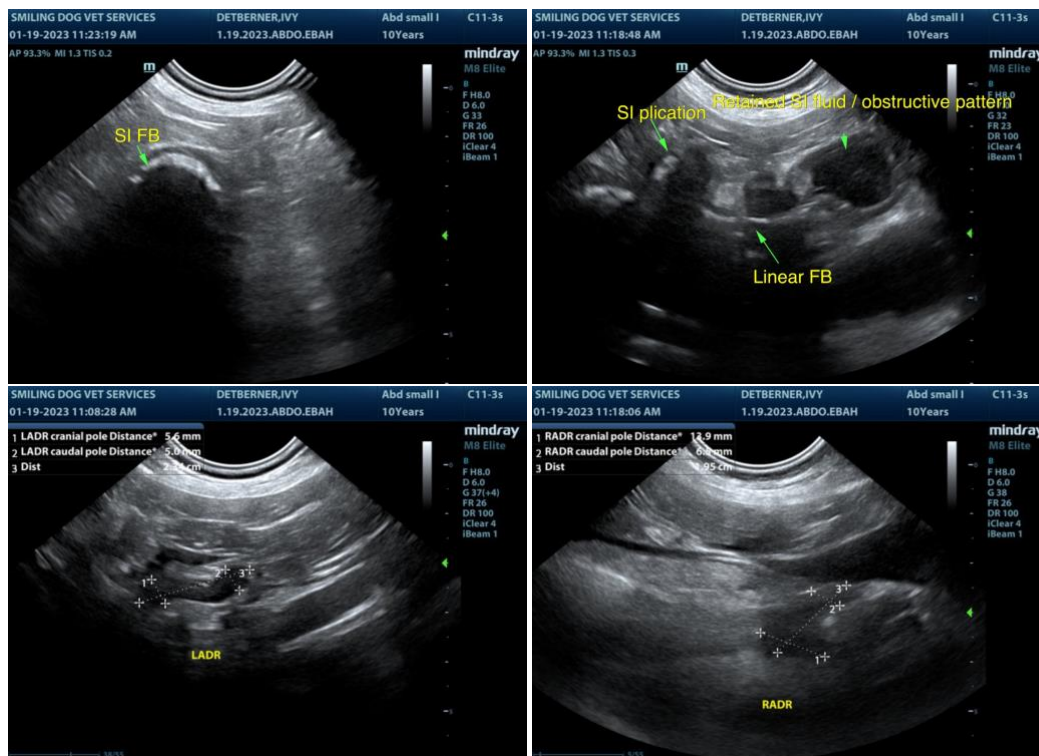
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

**R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)**  
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