

**DATE PRESENTING CLINICAL SIGNS**

9/8/22

Anorexia and bloody diarrhea since 9/2, no vomiting, no history of dietary indiscretion or change per O. P hasn't eaten anything since Saturday 9/3 but radiographs showed ingested material in stomach. No abdominal pain on PE. P still fairly energetic. Rectal normal.

**PATIENT**

Loki Hoesch

Current Medications: Metronidazole 15mg/kg BID starting 9/6 PM  
Lab Results: Pending.

**SPECIES**

Canine

Date of Previous IntraPet Ultrasound: No previous.  
Sedation: Torbugesic.  
Stat Report: Not requested.

**BREED**

GSD X

**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**

1/27/20

The prostate is large at (1.45 cm) for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

**WEIGHT**

73 Pounds

The left kidney has a normal shape and size (6.69 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)

The right kidney has a normal shape and size (6.37 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.

**IMAGING PERFORMED BY**

Stephanie Warga  
RDCS, RVT

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.53 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**

Fullerton AH

The right adrenal gland is normal in size measuring 0.66 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. Durastanti

**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.

**INVOICE**

41169

**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. There is a small focal soft shadowing object visualized within the lumen measuring approximately 1.27 cm in diameter.

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 0.23 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***

There is scant free abdominal fluid and there are mildly prominent mesenteric lymph nodes at the root of the mesentery measuring 0.63, 0.64 cm.

## **ULTRASONOGRAPHIC FINDINGS**

- Prominent/large prostate – Correlate with the age of neutering. If this pet was neutered after puberty, then this is likely within normal limits.
- Small shadowing area in the gastric lumen – Correlate with the feeding history, medication history, etc. There is a small area of shadowing material within the gastric lumen and no evidence of an obstruction.
- Mildly prominent mesenteric lymph nodes – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.
- Scant free abdominal fluid

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

The ultrasound changes observed were relatively mild. Unfortunately, the severity of ultrasonographic changes do not always correlate with the severity of Gi symptoms exhibited. Many causes for Gi signs cannot be definitively diagnosed by ultrasound alone.

- Consider metabolic causes based on bloodwork, ACTH stim results, Liver function testing, Gi panel (TLI/PLI, folate, cobalamin.)

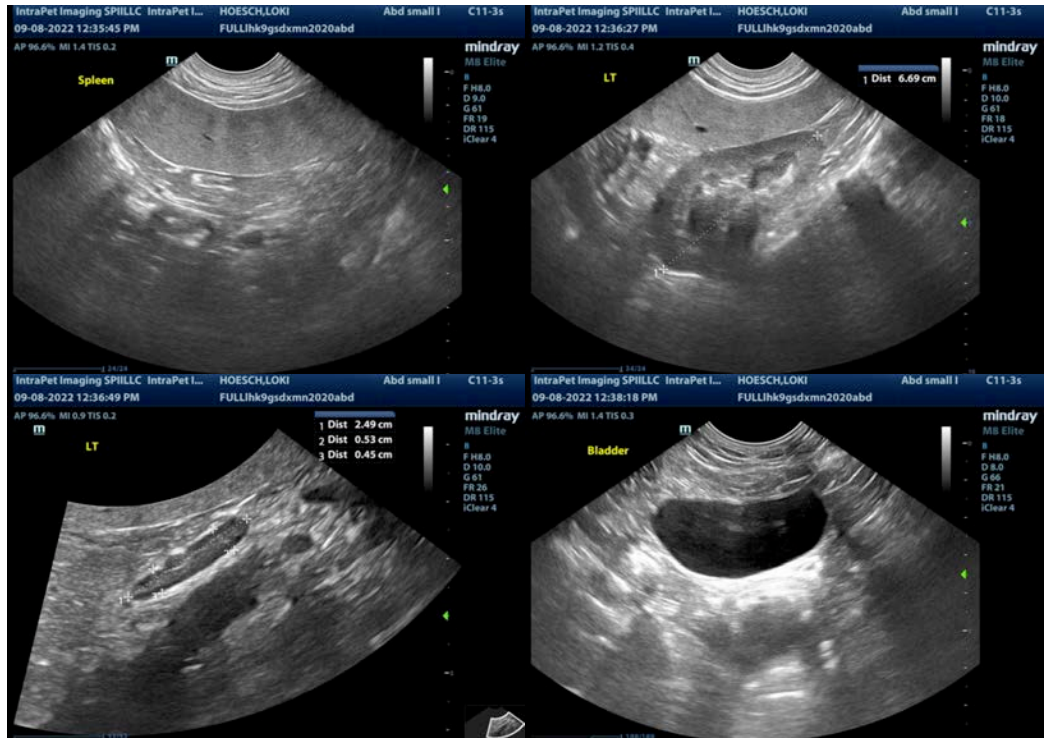
- Consider primary GI causes: Gi parasitism, dietary indiscretion, mild pancreatitis, bacterial dysbiosis, food allergy, IBD and less likely intestinal neoplasia.

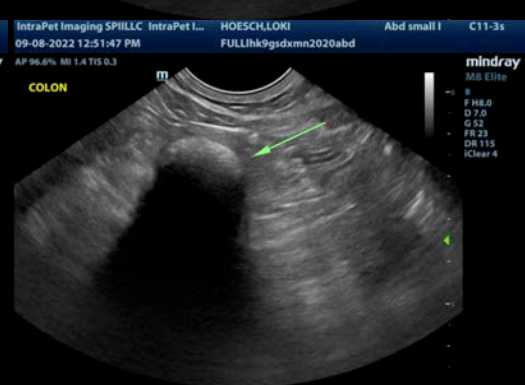
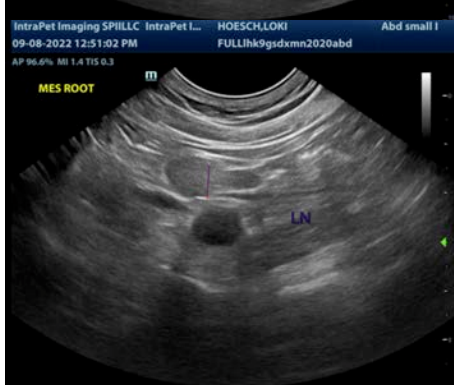
If primary GI disease is suspected in young patients with acute signs, I would most strongly consider dietary indiscretion, ingestion of foreign material, Gi parasitism, dysbiosis, Addison's disease and pancreatitis, acute colitis/gastroenteritis. Serial radiographs for evaluation of progressive obstruction/partial obstruction/foreign material is warranted. A focal obstruction was not visualized on today's exam but cannot be definitively ruled out.

Recommend symptomatic therapy and close monitoring, if symptoms persist, re-evaluate, and consider surgery/endoscopy to obtain biopsies and evaluate for foreign material.

There is a small amount of shadowing material within the gastric lumen. This does not appear to be causing an obstruction, but the nature of this is unknown and could possibly cause some irritation(?).

Given the breed of this pet, I would also consider a GI panel to Texas A&M to evaluate for a cobalamin deficiency, exocrine pancreatic insufficiency, and dysbiosis.





**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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