

**DATE**

6/30/22

PRESENTING CLINICAL SIGNS

P presented 5/31/22 for weight loss. Blood work at that time was WNL other than PSL 610 (24-140). p was seen at the ER 6/12/22 for vomiting and was treated symptomatically with Cerenia and SQ fluids. p seen 6/24/22 for diarrhea, treated with a bland diet and Metronidazole. Vomiting had resolved.

PATIENT

Ginny McWilliams

Current Medications: None listed.

Lab Results: PSL 610 (24-140).

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Stephanie Pearce RDCS, RVT.

SPECIES

Canine

BREEDAustralian Cattle Dog
Mix**SEX**

Spayed Female

AGE

7/23/15

WEIGHT

27.2 lbs

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The **urinary bladder** is well distended with anechoic contents. The wall is smooth and regular. No abnormalities are noted with the trigone or proximal urethra, and there is no evidence of sediment, cystoliths, polyps or a mass.

Kidneys

The **left kidney** measures 4.95 cm. The capsule is smooth. Its overall architecture, including the definition of the cortico-medullary junction, is preserved. Very small mineralizations of the diverticulae and pelvis are present, without evidence of nephroliths or pyelectasia. Blood flow is within normal limits. The surrounding mesentery is not hyperechoic.

The **right kidney** measures 5.18 cm. Findings are similar to the left kidney.

Aortic bifurcation/trifurcation

No abnormalities observed.

INTERPRETED BYLisa Carioto, DVM,
DVSc, Diplomate
ACVIM**Adrenal Glands**

The **left adrenal gland** measures 0.41 cm at the cranial pole, 0.37 cm at the caudal pole and 1.77 cm in length. No abnormalities are noted with the gland's overall architecture, echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

HOSPITAL NAME

Charm City VH

The **right adrenal gland** measures 0.58 cm at the cranial pole, 0.45 cm at the caudal pole and 1.39 cm in length. No abnormalities are noted with the gland's overall architecture, echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

REFERRING VET

Dr. Eavers

Spleen

The spleen is within normal limits in size, architecture, echotexture, and echogenicity. The capsule is smooth. No abnormalities are observed with its vasculature, i.e. congestion and thrombi are not identified.

INVOICE

31375

Liver

No obvious abnormalities are observed with the size of the liver. Its borders are smooth and sharp. The liver's echotexture is homogeneous, yet very mildly coarse or granular. It is within normal limits in echogenicity. Focal lesions are not observed. The walls of the portal veins are mildly prominent, however, no abnormalities are observed with the larger hepatic vessels.

The gallbladder (GB) wall is within normal limits in thickness and echogenicity. A small to moderate amount of free floating, gravity dependent, and inspissated echogenic material is present within the GB. The portions

of the cystic and/or common bile ducts observed are not dilated or tortuous, i.e. there are no signs of an obstruction.

Gastrointestinal

A large amount of gas is present within the lumen of the stomach. The gastric wall is within normal limits in thickness and the wall layers are well defined, however, the submucosa is mildly prominent and fogging of the muscularis is noted. No obvious abnormalities are observed with its peristalsis.

The small intestinal wall thickness is within normal limits and the definition of the wall layers is preserved, however, the mucosa, submucosa and muscularis are somewhat prominent in a number of segments, with fogging of the mucosa and muscularis. Abnormally dilated loops of bowel are not observed.

Gas and ingesta are present in the transverse colon.

The colonic wall is not thickened, except for one segment at 0.22 cm. Mural detail is preserved, including the mildly thickened region. Formed stools are present within the colon.

Pancreas

Only a small portion of the **left limb** of the pancreas is observed due to the large amount of gas in the surrounding gastrointestinal tract. It has a mildly coarse echotexture and is very mildly hypoechoic. The surrounding mesentery is mildly hyperechoic. Although overt signs of pancreatitis are not observed a subtle smoldering pancreatitis cannot be excluded.

Other

Lymph nodes No abnormalities are observed

Abdominal effusion is not visualized.

Mesentery

The mesentery surrounding the small intestines is mildly, but diffusely hyperechoic.

Diaphragm

Multiple "lung rockets" noted

ULTRASONOGRAPHIC FINDINGS

- **Gastrointestinal tract:** A chronic enteropathy, e.g., inflammatory bowel disease, dysbiosis, food or fat intolerance, inadequate amounts of dietary fibre, maldigestive disease, etc. are possible.
- **Mesentery:** Steatitis due to an underlying inflammatory process is suspected, whether it be IBD, with or without pancreatitis.
- **Gallbladder:** Gallbladder **sludge** is often clinically insignificant, however, some dogs may show clinical signs of gastroesophageal reflux disease (GERD), including vomiting, pica, etc. Therefore, obtaining a history regarding signs of GERD from the client is suggested. Treatment with an anti-acid, proton pump inhibitor or ursodeoxycholic acid may be required depending on the her history.
- **Pancreas:** A smoldering pancreatitis cannot be excluded, particularly since only a very small portion of the pancreas could be evaluated (due to the large amount of gas in the GI tract).

- **Liver:** A very mild reactive hepatopathy may be present.
- **Kidneys:** Very mild mineralization may be due to early degenerative changes. No major abnormalities are observed.
- Note, **pulmonary pathology** may be present. Evaluation of Ginny's history for a cough, exercise intolerance, etc. is suggested, as well as her diet (raw meat, grain free).

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Review of current diet (raw meat diet), i.e. *Campylobacter* spp, *Clostridium* spp., etc.

Obtain a history regarding signs of GERD and pica

Thoracic radiographs to evaluate for pulmonary pathology.

Baseline cortisol to exclude hypoadrenocorticism due to the waxing and waning GI signs.

Deworm, (e.g., fenbendazole), even if receiving monthly heartworm prevention.

Diet trial (veterinary prescription *low fat*, hypoallergenic, hydrolyzed or novel protein) for example, Purina HA. Royal Canin Hypo HP possible, but is higher in fat. Low fat, hypoallergenic diets also available through Rayne

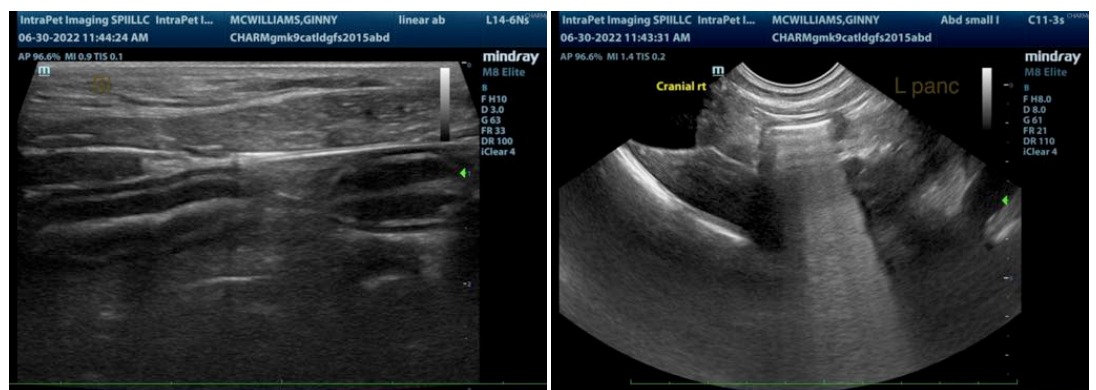
Small, frequent meals

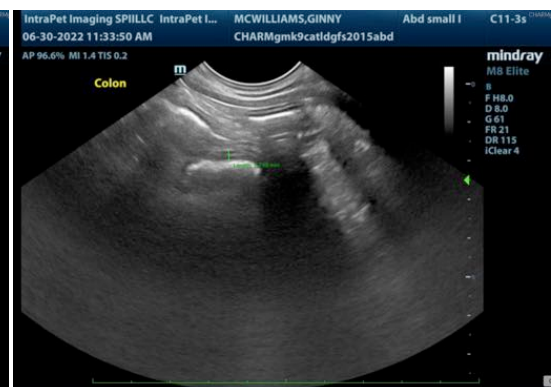
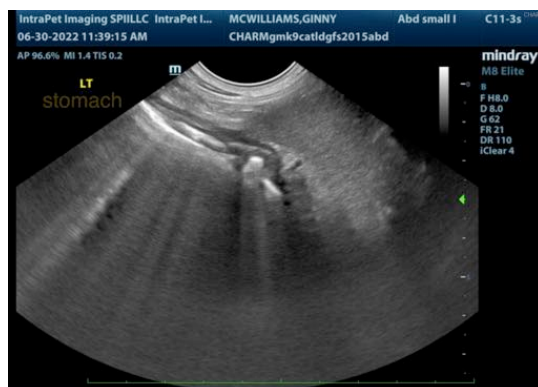
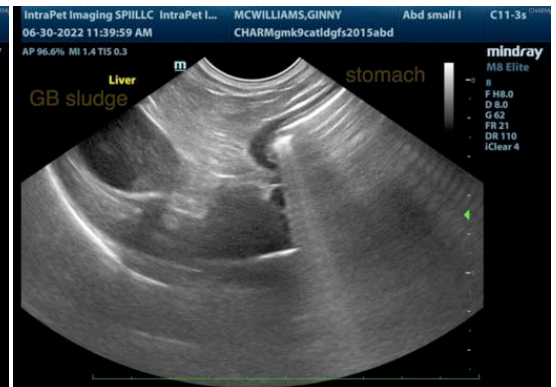
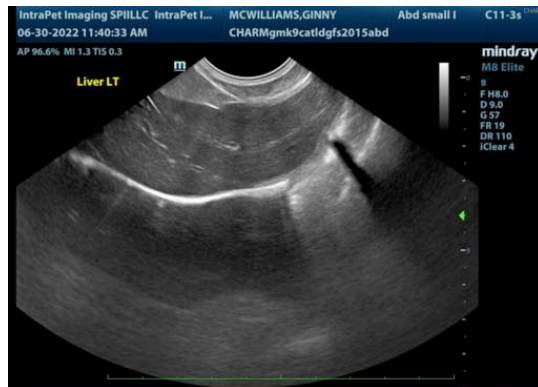
Supplementation with psyllium (soluble fibre) may be required, particularly if hydrolyzed hypoallergenic diet is fed

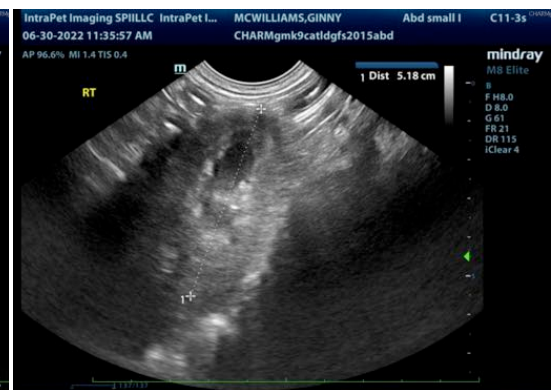
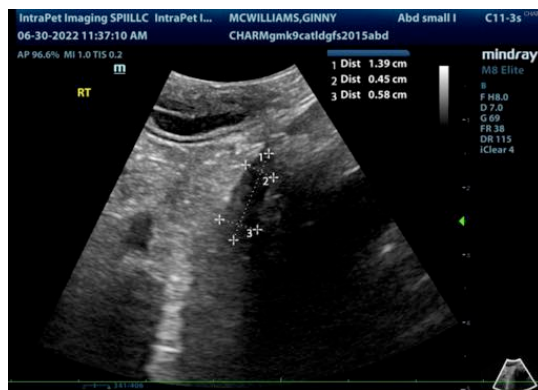
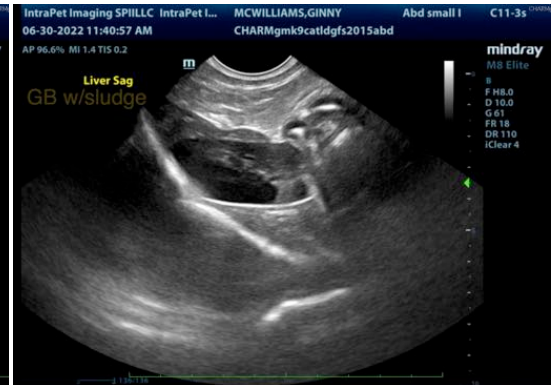
If signs of GERD, 10-14 day trial with famotidine or omeprazole (0.7-1 mg/kg PO **q12h**)

Serum cobalamin, folate, TLI to exclude underlying EPI.

Endoscopy and biopsies of the upper and lower GI tract may be eventually be required, if no response to deworming, diet trials and other suggestions, above







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.

Lisa Carioto, DVM, DVSc, Diplomate ACVIM
Lisa.Carioto@sonopath.com