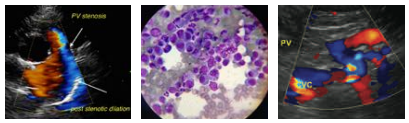
IMAGING PERFORMED BY

IntraPet.com



SonoPath
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DATE
7/1/22

PATIENT
Gus Sterling

SPECIES
Canine

BREED
Golden

SEX
Neutered male

AGE
5/13/20

WEIGHT
79.8 lbs

INTERPRETED BY
Beth Johnson, DVM DACVIM

HOSPITAL NAME
Greenbrier VC

REFERRING VET
Dr. Whitfield

INVOICE
31412

PRESENTING CLINICAL SIGNS

Chronic diarrhea and intermittent nausea for 1 month. P presented to ER 1 month ago for vomiting with blood in it. Bits of rubber (or rubber band?) found on rectal. Repeat x-rays have not shown foreign material or blockage. P nausea and energy improved greatly on carafate, omeprazole, metronidazole, amoxicillin, and gabapentin. After stopping meds, the nausea returned somewhat and the omeprazole and metronidazole course was repeated with addition of proviable and swap to I/d. P energy returned to normal and no more vomiting was seen, but the P continues to have pudding-like diarrhea. P is currently on metronidazole, proviable, and I/d with some W/d added. No more vomiting has been seen, but the O reports that since this started P burps frequently which is unusual for him.
Current Medications: Metronidazole 20 mg/kg BID 10 days., Proviable
Lab Results: Negative fecal. Fecal Cytology showed normal bacteria and occasional yeast. CBC and chemistry with electrolytes within normal limits. Most recent x-rays appear to show no significant findings.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is adequately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

The prostate is normal for a neutered dog.

Left kidney is normal is size (7.31 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Right kidney is normal is size (6.7 cm),shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Adrenal Glands

Adrenal glands are small (flattened contour). Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. The left adrenal gland measures 2.82 x 0.56 cm at the cranial pole and 0.52 cm at the caudal pole. The right adrenal gland measures 3.08 cm long, 0.8 cm at the cranial pole and 0.71 cm at the caudal pole.

Spleen

Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

Liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent. However, complete visualization of far wall is partially inhibited by gas. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of peritoneal effusion noted in these images. Both medial iliac lymphadenopathy and mesenteric lymphadenopathy are noted with the most prominent mesenteric lymph node measuring 1.1 x 2.6 cm.

ULTRASONOGRAPHIC FINDINGS

PRIMARY FINDINGS:

Flat adrenal glands – This can be a normal patient variant and/or a sign of exogenous cortisol administration. If exogenous steroids are not being administered, hypoadrenocorticism (either relative or absolute) should be considered.

Medial iliac and mesenteric root lymphadenopathy. The most likely differential is reactive lymph nodes. Infiltrative neoplasia cannot be ruled out, but is considered less likely.

The stomach contains contents most consistent with normal ingesta, soft fluid absorbing foreign material cannot be ruled out, but is considered less likely. There is no obstructive pattern, plication, etc. to indicate an obstruction.

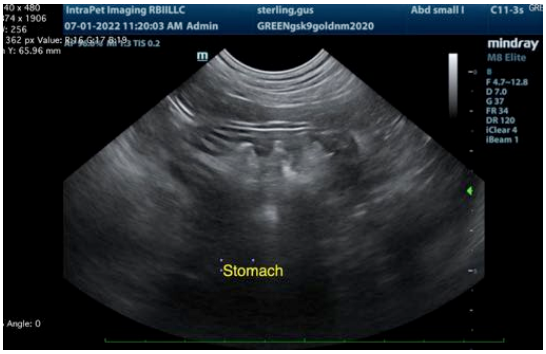
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

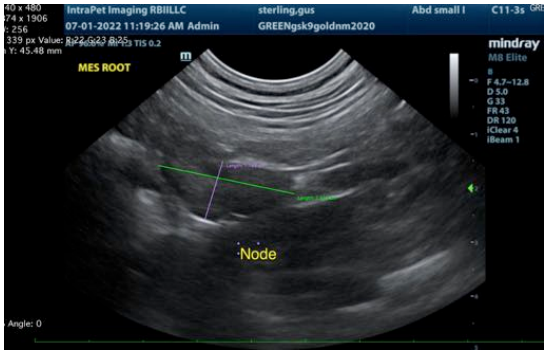
Given this patient's age and clinical signs further work-up of possible gastrointestinal disease as well as subjectively flat adrenal glands could include:

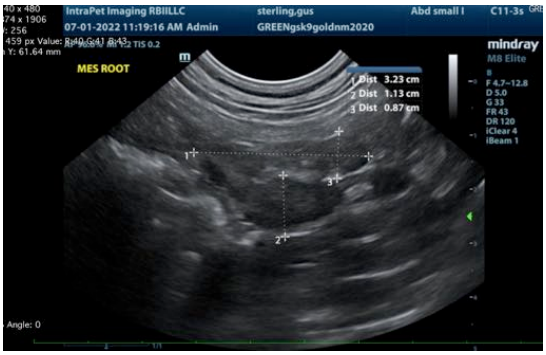
1. A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function. Baseline cortisol can be added to that panel and is recommended. If the baseline cortisol is less than 2, a full follow-up ACTH stimulation test is recommended to rule out hypoadrenocorticism.

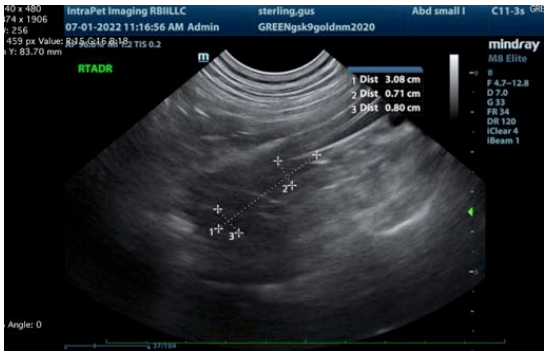
2. A fecal enteropathogen PCR panel to Texas A&M GI Laboratory could be considered for further evaluation of possible infectious disease.

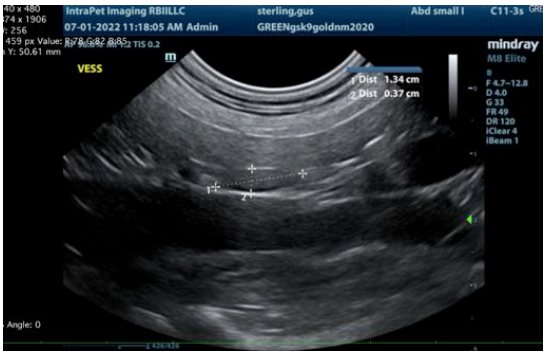
In the meantime diet transition to a novel or hydrolyzed protein diet based on trial and error basis is recommended to address potential food allergy in a patient of this age. If further diagnosis is not obtained from the PCR panel and hypoallergenic or novel protein does not help to alleviate clinical signs then the next diagnostic steps that can be considered are a FNA of the mesenteric lymph nodes if the patient's coagulation status is appropriate.

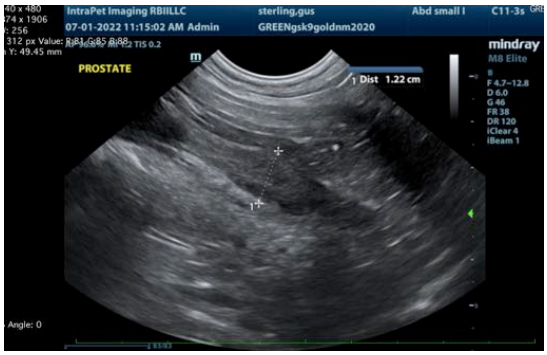












The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Beth Johnson, DVM DACVIM

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