IMAGING PERFORMED BY

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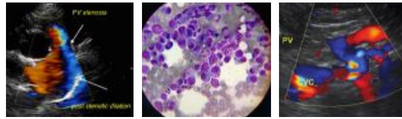

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DATE

2/3/23

PATIENT

Linus McMahon

SPECIES

Canine

BREED

Goldendoodle

SEX

Neutered Male

AGE

9/11/09

WEIGHT

57.2 Pounds

INTERPRETED BY

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

HOSPITAL NAME

Animal Medical Clinic of Dulaney Valley

REFERRING VET

Dr. Chrest

INVOICE

20944

PRESENTING CLINICAL SIGNS

History: 1/17/23 decreased appetite, with SDMA increased in September Dr. Chrest recommended Kidney diet. 1/18/23 lab results revealed increase in SDMA, Low TP and low ALB. UPC found NOT to account for low ALB. 1/20/23 ALB decreased again . Owner reported that day better appetite adding can food and peas. Waiting for owner to drop off urine for UCP again.

Current Medications: Galliprant 60mg 1 SID, Tramadol 50 mg 1&1/2 a.m 2 p.m., Thyro tabs 0.5 mg 1/2 BID, Adequan inj. 1.2 cc once a month, Simparice Trio 44-88# once a month, Was on hills Z/D diet then Royal Cainin Hydrolized +renal

Lab Results: See attached.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Approved.

Imaging Performed By: Stephanie Warga RDCS, RVT.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic urine. The bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2.0 cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The prostate is normal in size (1.3 cm) and shape 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.

The left kidney has a normal shape and size (5.78 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (4.84 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.89 cm 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.

The right adrenal gland is normal in size measuring 0.81 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.

Spleen

The spleen is subjectively normal/borderline large in size, with a scalloped edge. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

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 gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The lumen of the stomach contains a focal area of hard shadowing material, consistent with possible dense ingesta or foreign material. The stomach wall appears to be of a normal thickness at <0.7 cm 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. Correlate with the feeding history and abdominal radiographs, as a gastric foreign body is possible.

The visualized areas of duodenum, jejunum and ileum have a uniform diameter with minimal fluid distension. Wall appears subjectively, mildly increased. Bowel loops follow a typical curvilinear path with distinct wall layering. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed. The jejunum measures 0.46 cm. The duodenum measures 0.51 cm.

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 prominent and mottled compared to the surrounding isoechoic mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Prominent hypoechoic and mottled pancreas- The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.

- Hard shadowing focal material within the gastric lumen. Correlate with feeding history and abdominal radiographs. Consider the possibility of a gastric foreign body.

- Subjectively thickened small intestine. The mild small intestinal wall changes may be a normal variant in this patient or could be consistent with an inflammatory process (e.g., inflammatory bowel disease).

Secondary Findings

- Moderate gallbladder debris. The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting but seems unlikely to be causing a current issue. Recommend continued monitoring.

- Subjectively large spleen with scalloped edges. Differentials include normal anatomic variation, congestion or less likely infiltrative disease.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No focal lesions are visualized associated with the gastrointestinal tract, which would be consistent with a mass effect, severe pancreatitis, etc. There is a focal hard shadowing object visualized within the gastric lumen, correlate this with feeding history. If the patient has been adequately fasted, consider the possibility of a chronic gastric foreign body (?). Correlate these findings with radiographic findings.

The pancreas is somewhat prominent and hypoechoic with minimal to mild surrounding inflammation. These changes could be consistent with chronic pancreatic inflammation or previous episodes of pancreatic inflammation. Correlate with a quantitative cPLI level and consider treatment for gastroenteritis/pancreatitis.

The small bowel has adequate layering and subjectively appears slightly thickened. This could be seen in a normal pet or a pet with mild gastrointestinal disease.

The primary differentials for hypoalbuminemia would be lack of production by the liver, or protein loss by the GI tract and kidneys. If a chronic gastric foreign body is suspected, this could be a source. If this is unlikely, recommend a liver function test and a urine to protein to creatinine ratio, looking for evidence of disease associated with these organ systems. If these are normal, then consider further work up for underlying GI disease.

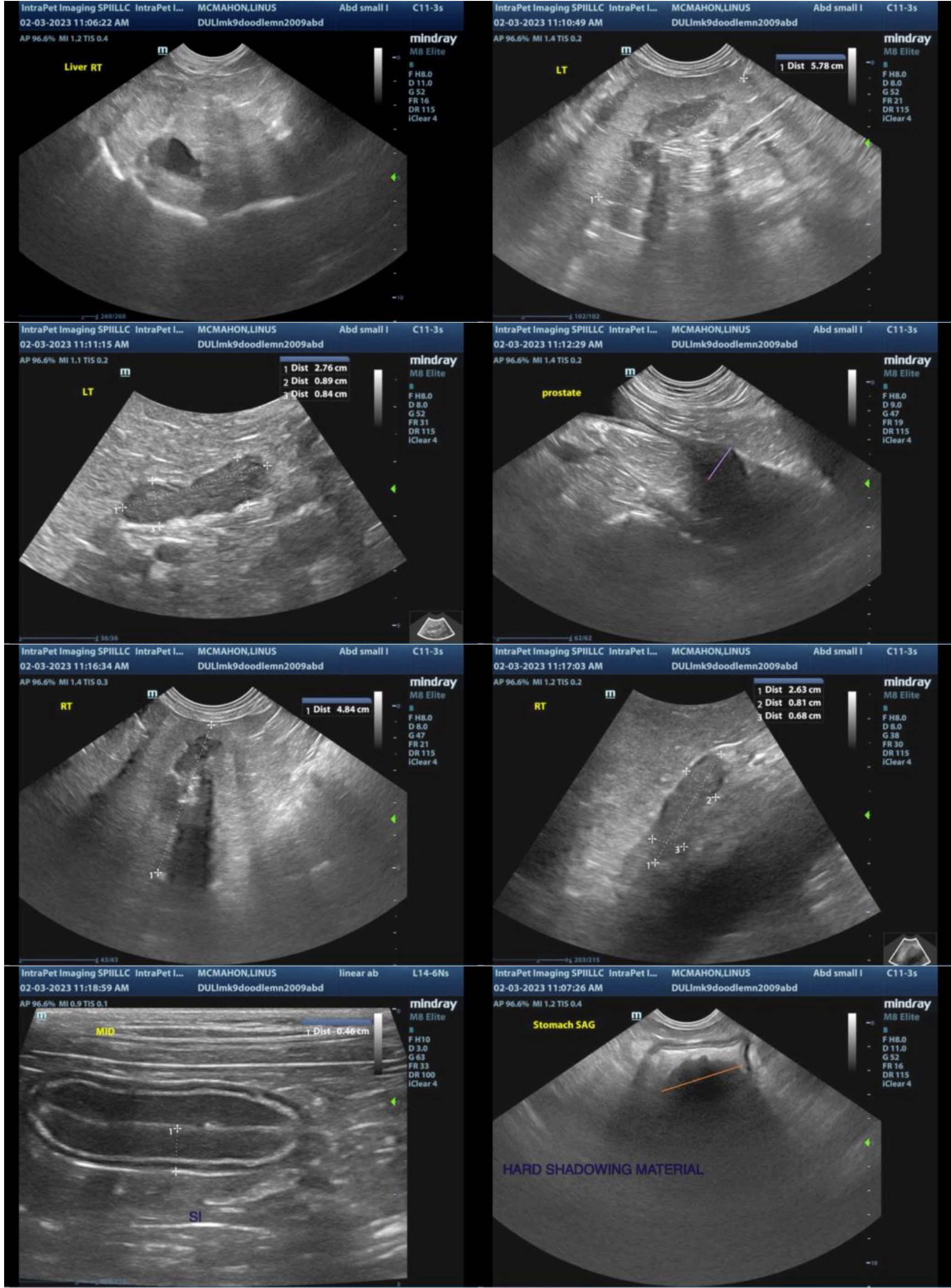
- Consider a novel protein/hydrolyzed protein diet (exclusively at least 4-6 weeks)

- Consider a GI panel to Texas A&M for evaluation of B12 levels, folate, PLI/TLI etc. to further evaluate for pancreatic/small intestinal disease.

- Recommend chronic probiotic therapy

- If GI disease is strongly suspected, and there is no response to these therapies, then consider obtaining GI biopsies.

Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.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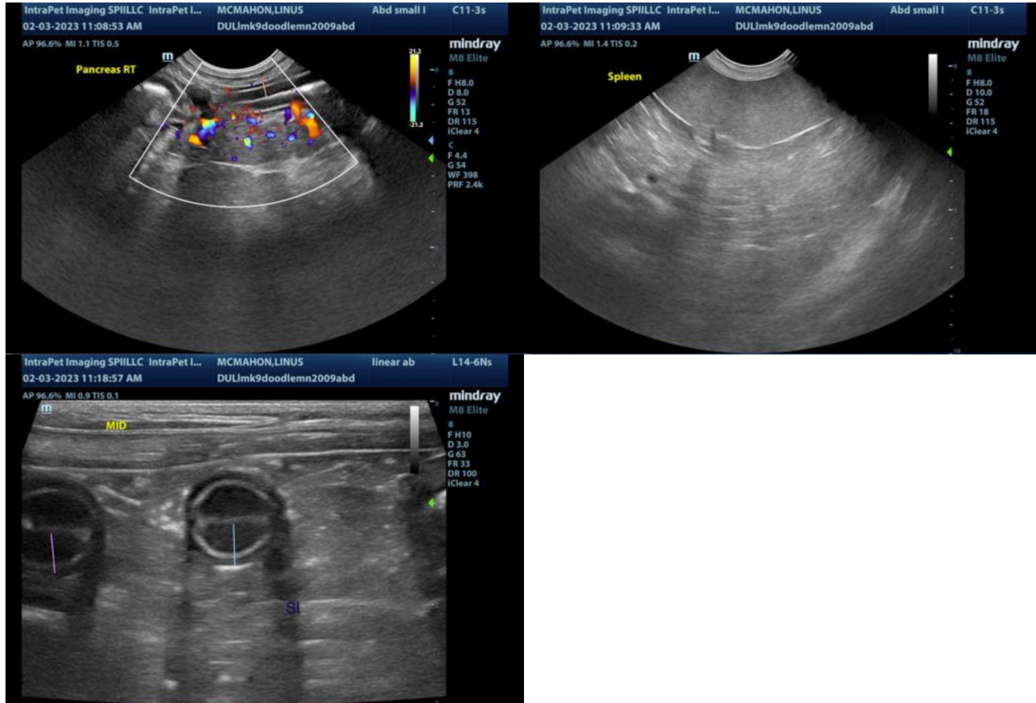
Stomach SAG
HARD SHADOWING MATERIAL



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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
kathleen.sennello@sonopath.com