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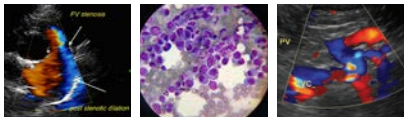

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DATE

12/17/21

PATIENT

Samson Barello

SPECIES

Canine

BREED

Labrador Retriever

SEX

Neutered Male

AGE

2/2/11

WEIGHT

68 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Stephanie Pearce RDCS, RVT

HOSPITAL NAME

Chadwell AH

REFERRING VET

Dr. Oliveri

INVOICE

33514

PRESENTING CLINICAL SIGNS

History: Anorexia for 7 days, diarrhea, lethargic. Cachexic appearance, no murmur heard, BCS 2/5.

Current Medications:
Lab Results: Electrolyte abnormalities, low albumin and globulin, low thyroid profile (euthyroid sick syndrome?)
Radiographs: Radiographs - chest: cardiomegaly, wide caudal mediastinum, on lateral view on ventral portion of the heart appears might have fluid or soft tissue density. Abdomen: very poor detail in mid to cranial abdomen, concern for small amount free fluid in the abdomen or diffuse inflammatory process.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required for a full diagnostic ultrasound.
Stat Report: **requested.**

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 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The prostate is normal in size (0.74 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 (5.87 cm) with non-obstructive nephroliths. 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, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (6.21 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 0.65 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 0.74 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 normal to small 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. Small size may be due to mild hypovolemia.

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 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. No masses or focal lesions were observed.

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 measured 0.32 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 liquid 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 hypoechoic as 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

There is a large volume of echogenic free abdominal fluid. No evidence of a lymphadenomegaly. The omentum generally appears to be of increased echogenicity.

Other

A brief view of the heart was submitted, and there is significant pericardial effusion visualized. Cardiac ultrasound is pending.

PRIMARY FINDINGS

- Large volume echogenic free abdominal fluid
- Prominent, hypoechoic pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Pericardial effusion evident

SECONDARY FINDINGS

- Borderline small spleen – Most likely consistent with a hypovolemic spleen.
- Liquid fecal material visualized within the colon – supportive of diarrhea.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

This is a somewhat confusing case in that there is a large amount of echogenic abdominal fluid present, but no obvious focal lesion visualized in the abdomen. Additionally, there is a low albumin and globulin level as well as pericardial effusion present. I suspect the effusion is present due to a combination of pericardial effusion and borderline low albumin, but normally this albumin level would not result in effusion.

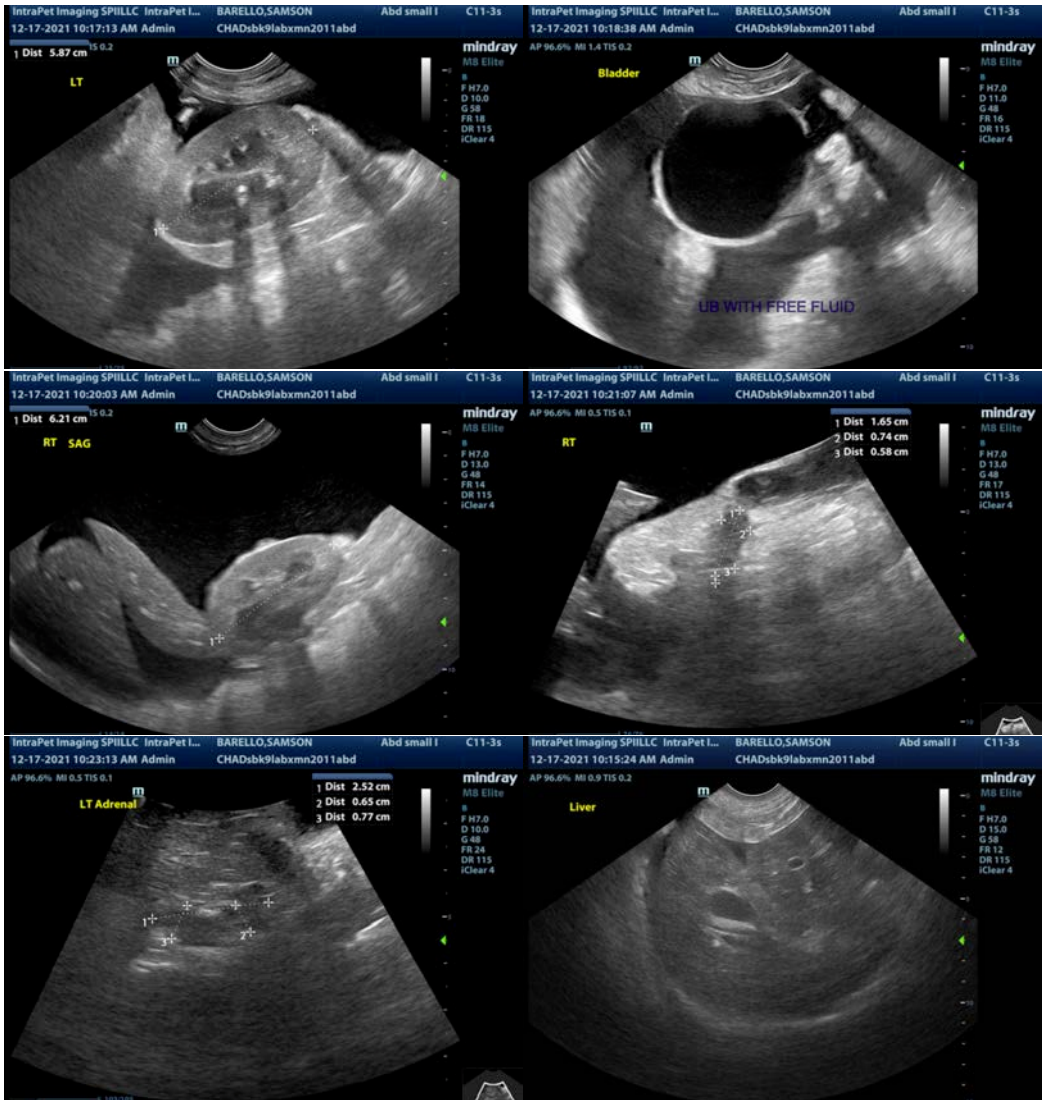
Recommend cardiac ultrasound and 3-view thoracic radiographs to evaluate for pleural effusion, pulmonary parenchymal changes, and for evidence of a heart base mass.

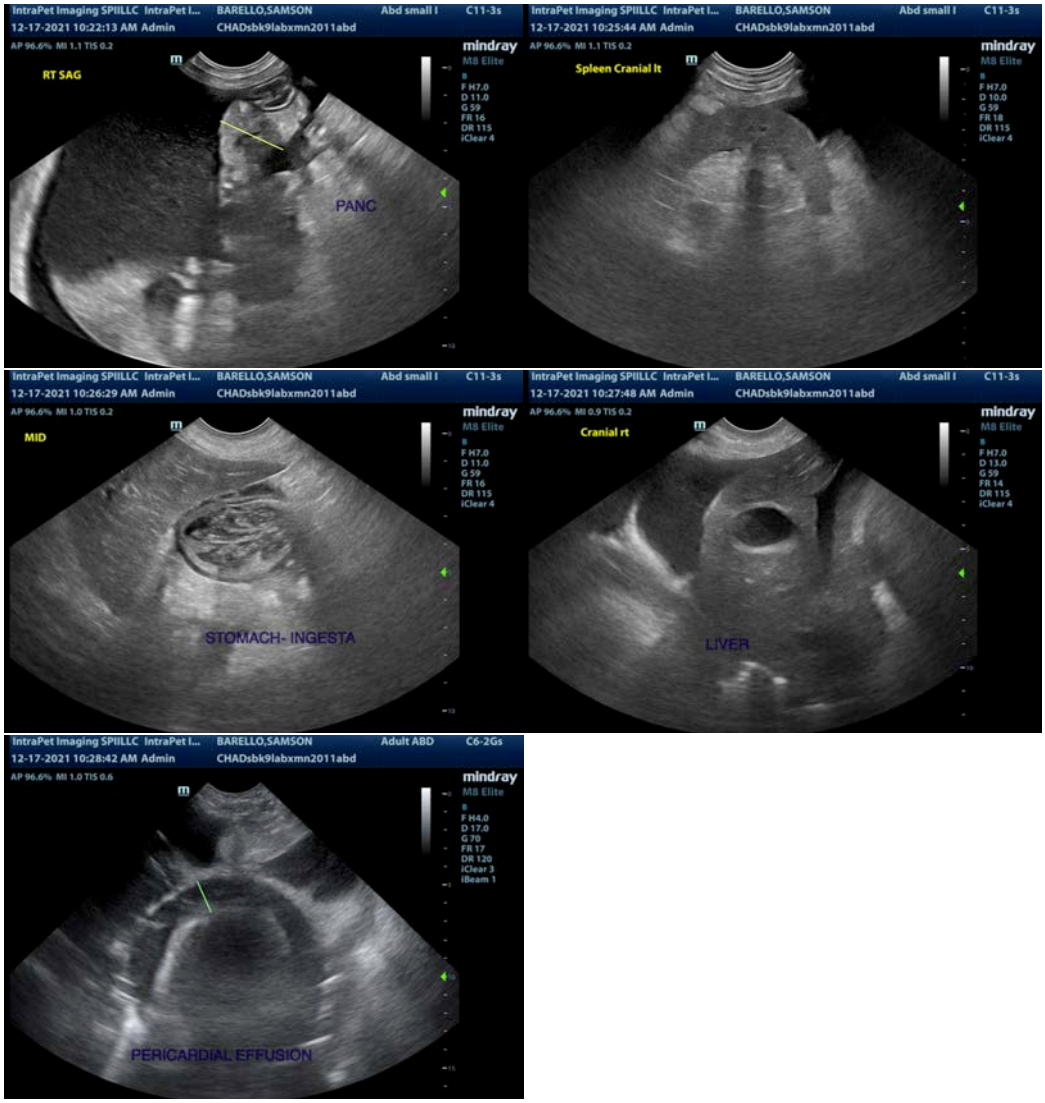
Recommend further workup for the hypoalbuminemia reported. This would entail a urinalysis with urine protein/creatinine ratio, pre- and post-prandial bile acids to evaluate liver function, and a GI panel to Texas A&M for a quantitative PLI, TLI, cobalamin and folate to look for underlying GI disease.

Based on reported diarrhea, underlying GI disease would be most likely, but no significant changes were visualized on ultrasound. Unfortunately, the fluid present can sometimes hinder full evaluation.

Recommend sampling of the abdominal effusion for cytology and fluid analysis. If liver function and urine protein levels are normal, then consider GI biopsies to look further into the hypoalbuminemia.

Considering the intrathoracic changes, this may be a situation where a full body CT scan would be helpful to look for any subtle mass lesions, etc. Additionally, consider evaluation for vasculitis, tick borne disease, etc.





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.

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