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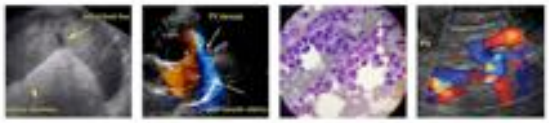

IMAGING PERFORMED BY
pawsonography@gmail.com 530-786-8340

PATIENT

Bosco Rodriguez

SPECIES

Canine

BREED

Australian Shepherd

SEX

Neutered Male

AGE

6 years

WEIGHT

71 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Loetitia Saint-Jacques, RVT

HOSPITAL NAME

Pine Creek VC

REFERRING VET

Dr. Nolet

INVOICE

91939

DATE

9/23/21

PRESENTING CLINICAL SIGNS

History: Dex/torb sedation. bloating- diarrhea chronic-
Very low ALB, GLOB, CHOL- suspect PLE. increased AST and creatkinase- Hypothyroid 0.7,

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 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 (6.43 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 (6.6 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 0.84 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 0.49 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 large and hyperechoic with a homogenous parenchyma.

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.

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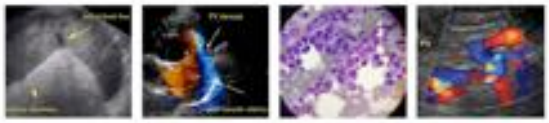

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Gastrointestinal

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 uniform diameter with minimal fluid distension. Wall thickness is increased. The duodenum measures 0.69 cm and the jejunum measures 0.62 cm, 0.45 cm and 0.48 cm. Bowel loops follow a typical curvilinear path. Some areas have mild mucosal speckling that is evident. 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

Evaluation of the peritoneal cavity did not reveal any evidence of lymphadenomegaly. A prominent mesenteric lymph node measured 1.61 x 4.49 cm. There is a large volume of anechoic free fluid. The omentum is generally irregular with increased echogenicity.

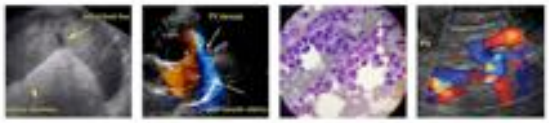
ULTRASONOGRAPHIC FINDINGS

PRIMARY FINDINGS:

- Thickened small intestine with intact layering and some evidence of mucosal speckling. The bowel wall thickening could be consistent with inflammation, edema, or infiltrative neoplasia. Bright mucosal speckling has been proposed to represent dilated lacteals or focal accumulation of mucus, cellular debris etc.. in the mucosal crypts of the small intestine.
- Large, hyperechoic spleen. These finding can be consistent with infiltrative disease or artifactual due to the surrounding hypoechoic fluid. Consider FNA of the spleen.
- Moderate mesenteric lymphadenopathy. The moderate mesenteric lymphadenopathy may be concerning for a neoplastic process although you can see significant lymphadenopathy in some cases of autoimmune inflammatory disease, infectious disease (tick borne disease), etc. FNA with cytology is recommended for further evaluation.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

I agree with your assessment that this is likely protein losing enteropathy. Ideally at least a urine dipstick would be performed to rule out proteinuria and a liver function test to rule out concurrent liver disease. Typically I would recommend a GI panel to evaluate for pancreatic disease, which is difficult to



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identify amongst a large volume of effusion and to look for evidence of B12 deficiency or dysbiosis, which can impair response to therapy. The most likely differentials for protein losing enteropathy are either inflammatory bowel disease, lymphangectasia or round cell neoplasia (other differentials exist. GI biopsies are necessary to differentiate these disease processes. If the patient is stable enough to have endoscopic biopsies I would consider this in conjunction with a splenic and mesenteric lymph node aspirate. If not, then consider an ultra low-fat diet and an anti-inflammatory dose of steroids at 0.5 mg/kg/day ideally after FNA are performed with hopes that this will help to stabilize your patient in hopes of obtaining GI biopsies in the future. I recommend an ionized calcium as sometimes these patients require calcium supplementation due to poor absorption. I recommend three view thoracic radiographs.

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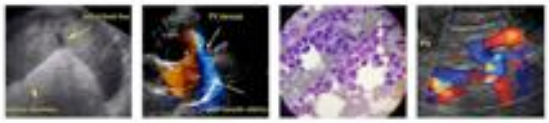

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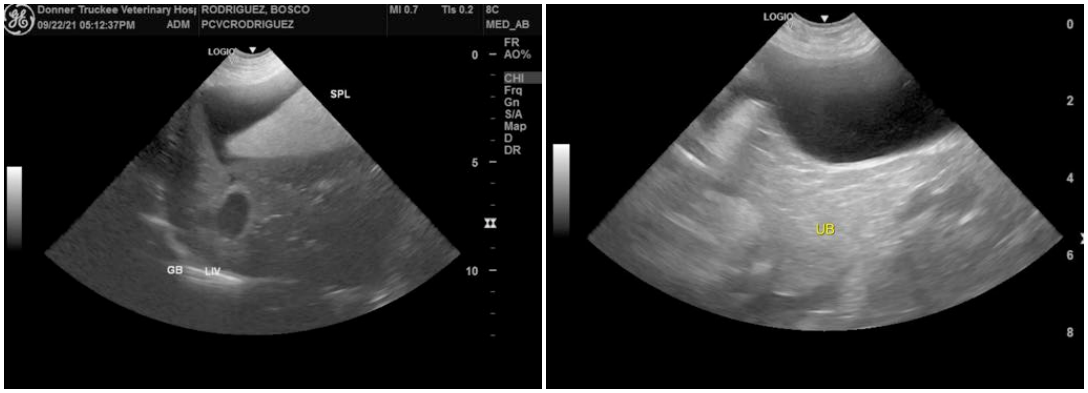

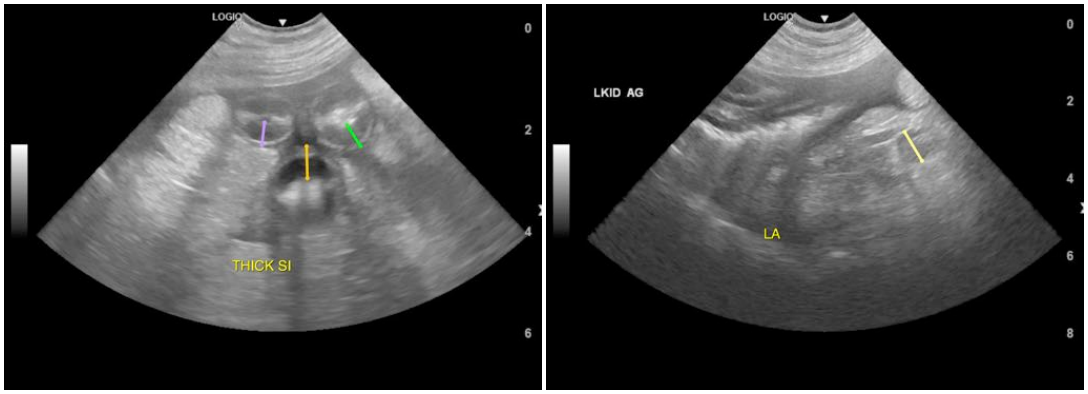

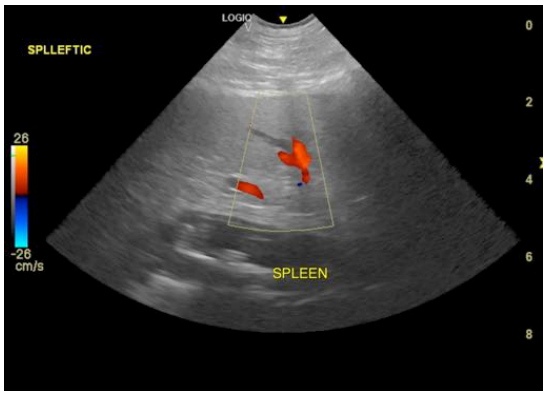

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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