IMAGING PERFORMED BY

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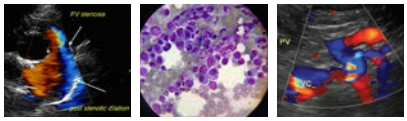

SonoPath

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DATE

1/5/22

PATIENT

Primo Clark

SPECIES

Canine

BREED

German Shepherd

SEX

Intact Male

AGE

10/1/13

WEIGHT

80 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Paradise AH

REFERRING VET

Dr. Pearson

INVOICE

33989

PRESENTING CLINICAL SIGNS

History: Chronic vomiting with acute exacerbations for last several years. Since October, enlarged spleen on radiographs.

Current Medications: Cerenia 120mg SID; Famotidine 20mg BID.
Lab Results: Attached separately.
Radiographs: splenomegaly. Attached separately.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not 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 large in size (3.9 cm in height on the sagittal view) but has a regular shape with smooth external margins. The parenchyma is heterogenous but no discrete focal lesions are present. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

The left kidney has a normal shape and size (8.31 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 (7.56 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 0.73 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 large in size. The spleen echotexture is heterogenous and mottled, the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. While there is no focal mass or nodular lesions visualized, the spleen does appear large and folded over upon itself.

Liver

The liver is subjectively normal in size, and hypoechoic with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. 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

Some of the areas of stomach appear significantly dilated with fluid. Part of the gastric wall appears severely thickened and irregular. This area is hypoechoic with a complete loss of layering. The gastric wall in this area measures 2.16 cm in thickness, creating a mass effect in what appears to be the area of the pylorus.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with moderate 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. The duodenum measured as normal (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) 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 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.

Other

A brief view of the heart was submitted. No pericardial effusion was seen.

Both testicles were visualized. No significant lesions were identified.

ULTRASONOGRAPHIC FINDINGS

- Large, heterogeneous prostate – Prostatic changes are most consistent with benign prostatic hyperplasia. Other differentials include bacterial prostatitis and prostatic neoplasia. However, given the lack of lower urinary tract symptoms, these differentials are considered less likely in this patient.

- Severe gastric wall thickening with loss of layering – most consistent with infiltrative disease to the gastric wall. Differentials would include carcinoma, lymphoma, a leiomyoma or leiomyosarcoma, gastric ulceration, hyperplasia, etc. There is a concern here for possible neoplastic lesion.

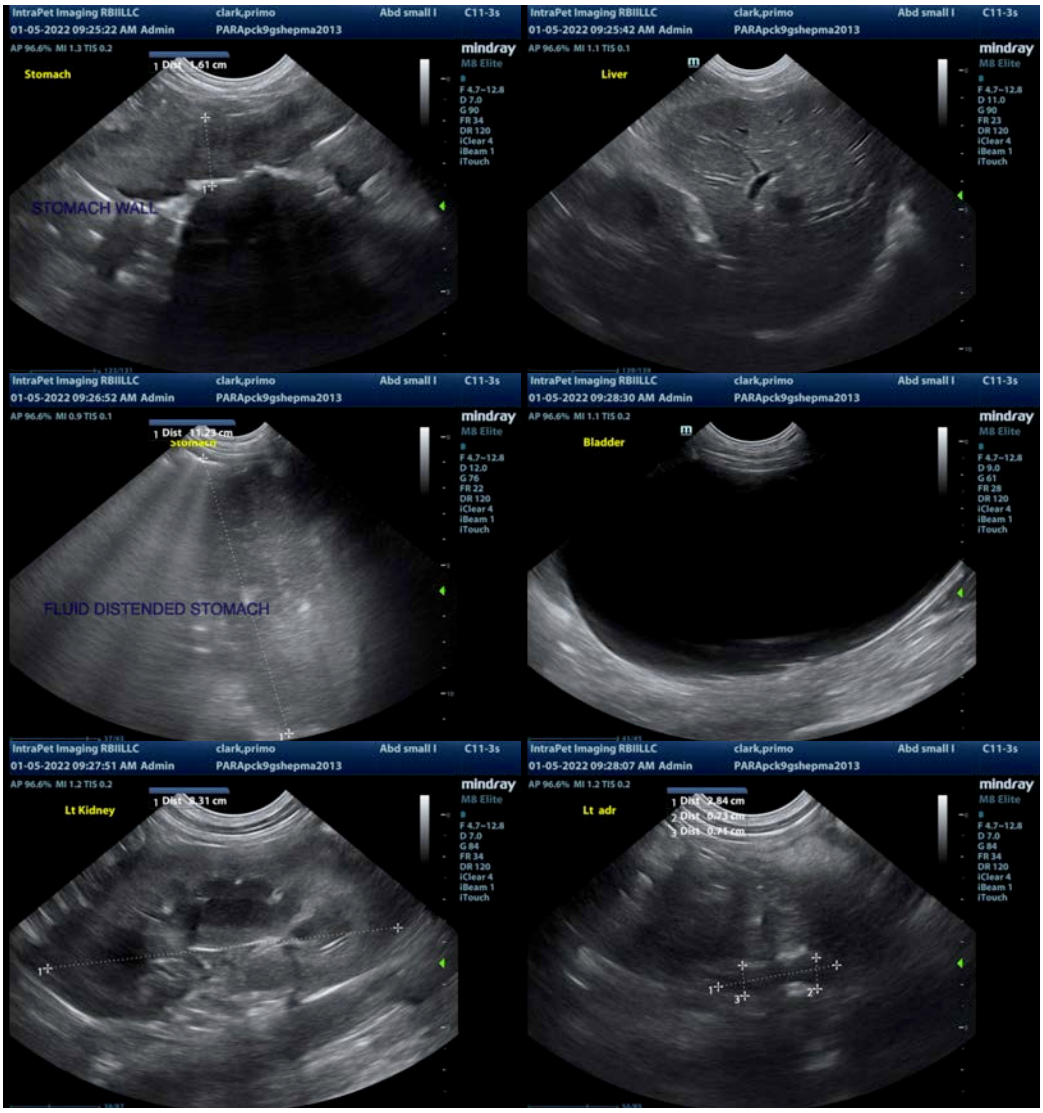
- Large, mottled spleen – The diffuse splenic changes are non-specific and could be consistent with lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.

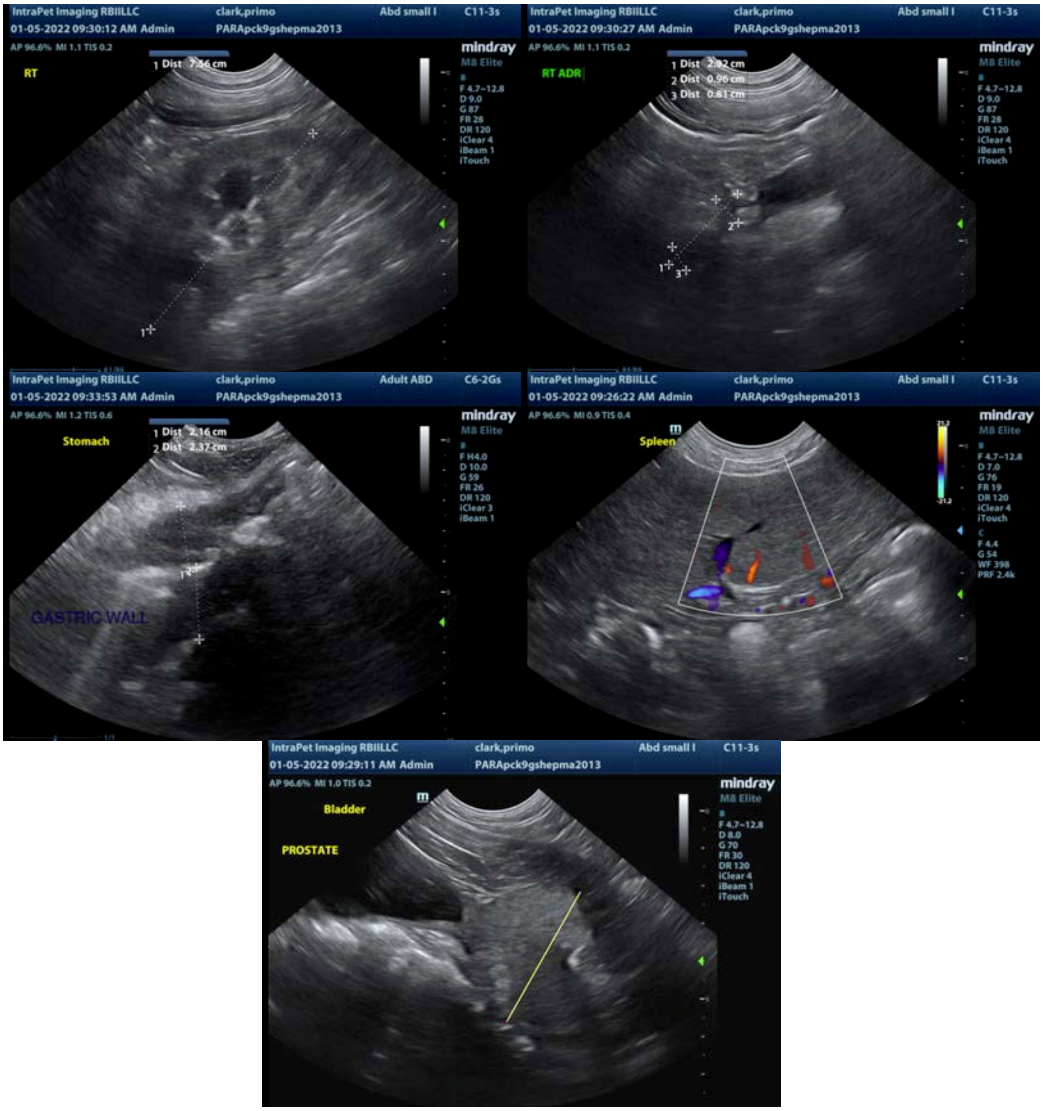
- Heterogeneous, hypoechoic liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy. The hypoechoic appearance favors the differentials of infiltrative disease or inflammatory/infectious disease.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The most significant lesion visualized is the gastric wall thickening. Additionally, both the liver and spleen have diffuse parenchymal abnormalities, which are non-specific.

- Recommend a fine needle aspirate of liver and spleen
- If an angle to aspirate the gastric wall is available, this could be considered.
- If aspirates are non-diagnostic, then consider full thickness surgical biopsies or endoscopic superficial biopsies can be attempted (full thickness biopsies are more likely to obtain a diagnosis, but are more invasive). Additionally, the area could be evaluated for resection at the time of surgery. I am concerned that this lesion may be too large to resect.
- Recommend 3-view thoracic radiographs.





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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