IMAGING PERFORMED BY

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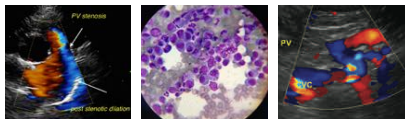

SonoPath
Clinical Sonography & Telecytology
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DATE
1/25/22

PATIENT
Trooper McDowell

SPECIES
Canine

BREED
Chihuahua

SEX
Neutered male

AGE
12/23/10

WEIGHT
5.8 lbs

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

HOSPITAL NAME
Padonia VH

REFERRING VET
Dr. Youssef

INVOICE
95512

PRESENTING CLINICAL SIGNS

History: losing weight, decreased appetite, vomiting.
Current Medications: Cerenia.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Stephanie Pearce 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 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 (3.32 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 evidence of corticomedullary rim sign present. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (3.23 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 evidence of corticomedullary rim sign present. 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 0.37 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 0.37 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 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.

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 gallbladder 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 stomach is moderately dilated with fluid and irregular shadowing material most consistent with normal ingesta and gas. 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 layering is adequate and there is no impression of reduced peristaltic activity. While no overt obstruction is visualized there is the subjective impression of pyloric wall thickening measuring 0.58 cm and dilation of the proximal duodenum and pylorus with fluid, gas and small amounts of shadowing material.

The visualized areas of duodenum, jejunum and ileum have a uniform diameter with minimal fluid distension. Wall appears subjectively, mildly increased. The duodenum measured 0.3 cm and the jejunum measured 0.3 cm. Bowel loops follow a typical curvilinear path with distinct wall layering. Visualized peristalsis appears appropriate. While no focal bowel lesions were visualized the proximal duodenum appears mildly corrugated and fluid dilated.

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

There is a large volume of anechoic free fluid. There is a severe mesenteric lymphadenopathy present with moderate/severe clusters of mesenteric nodes at the root of the mesentery measuring 1.3 cm, 1.4 cm and 1.3 cm in diameter. The omentum is of increased echogenicity around the enlarged mesenteric lymph nodes.

ULTRASONOGRAPHIC FINDINGS

PRIMARY FINDINGS:

- Large distended stomach dilated with shadowing ingesta/foreign material. Correlate these findings with feeding history and abdominal radiographs. This could be normal for a recently fed individual, but if fasting is adequate consider the possibility of ingested foreign material, delayed gastric emptying or a partial outflow tract obstruction. This area appeared questionably thickened on ultrasound.

- Subjective pyloric wall thickening. Findings can be consistent with inflammation or a neoplastic change. The findings may also be due to imaging artifact.

- Moderate to severe mesenteric lymphadenopathy. The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

- Free abdominal fluid. I recommend fluid analysis and cytology.

SECONDARY FINDINGS:

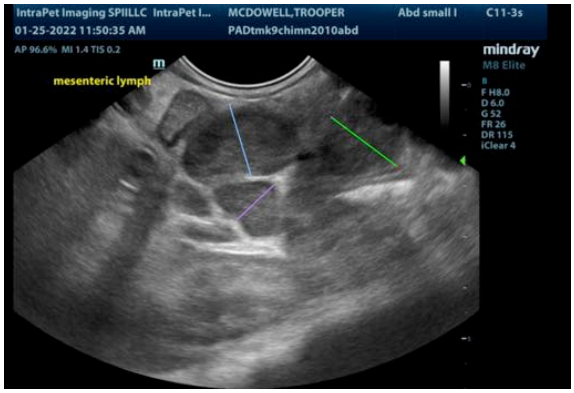
- Corticomedullary rim sign visualized in both kidneys. Clinical significance uncertain, can be seen in normal patients and in cases of ethylene glycol toxicity, chronic interstitial nephritis, and leptospirosis.

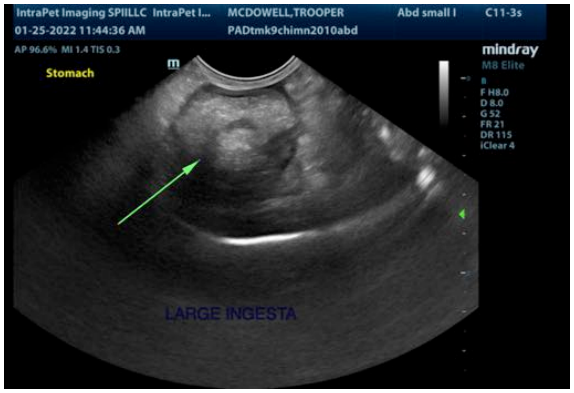
- Mild gallbladder debris. The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is the overall impression of inflammation in the abdomen with large, mesenteric lymph nodes and a very full gastric lumen with shadowing material and dilation/questionable thickening of the proximal pylorus and duodenum. While it is likely that the low albumin levels are at least partially due to GI causes an albumin in this range is unlikely to cause ascites unless there is concurrent issues going on. I recommend evaluation of the kidneys and liver for evidence of a concurrent cause of hypoalbuminemia.

- Recommend sampling of the free abdominal fluid for fluid analysis and cytology.
- Recommend FNA of large mesenteric lymph node.
- Correlate ultrasound findings with abdominal radiographs.
- Recommend three view thoracic radiographs.
- Recommend pre and post prandial bile acids as well as a urine protein to creatinine ratio with a urinalysis to look for additional causes of hypoalbuminemia.
- Consider a GI panel to Texas A&M to look for evidence of chronic intestinal disease and pancreatitis.
- If cytology and additional evaluation does not provide a definitive diagnosis consider exploratory surgery for full thickness GI biopsies and lymph node biopsies.

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AP 96.6% MI 1.4 TIS 0.3
Stomach
LARGE INGESTA
mindray
M8 Elite


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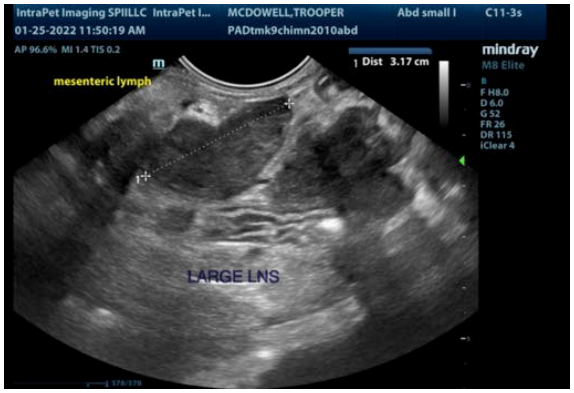
SPLEEN
mindray
M8 Elite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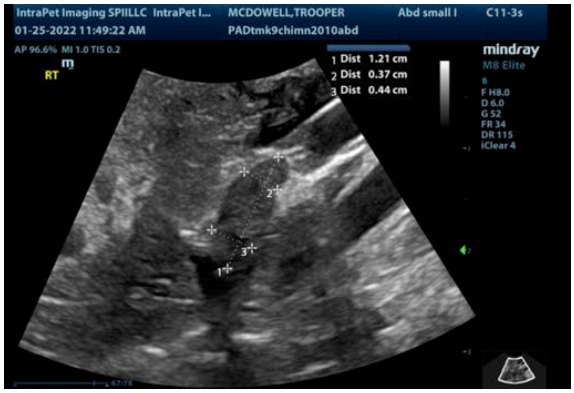
AP 96.6% MI 1.4 TIS 0.2
mesenteric lymph
1 Dist 3.17 cm
LARGE LNS
mindray
M8 Elite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AP 96.6% MI 1.0 TIS 0.2
RT
1 Dist 1.21 cm
2 Dist 0.37 cm
3 Dist 0.44 cm
mindray
M8 Elite


IntraPet Imaging SPIILLC IntraPet I... MCDOWELL,TROOPER Abd small I C11-3s
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AP 96.6% MI 1.4 TIS 0.2
RT
1 Dist 3.23 cm
mindray
M8 Elite


IntraPet Imaging SPIILLC IntraPet I... MCDOWELL,TROOPER Abd small I C11-3s
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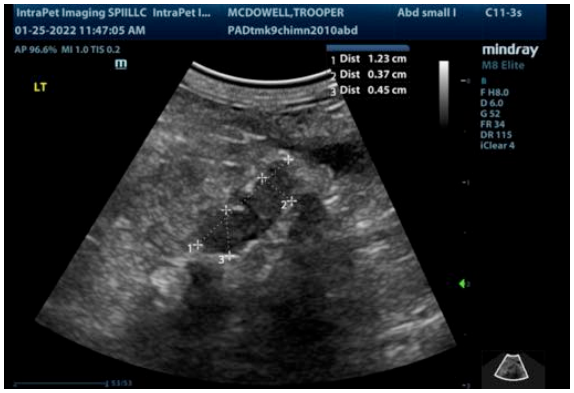
Bladder
mindray
M8 Elite



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)
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