SonoPath
Clinical Sonography & Telecytology
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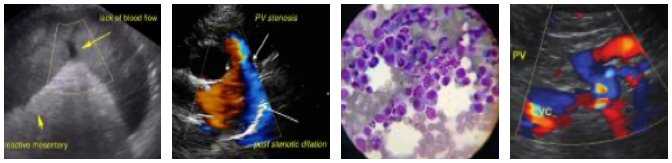


SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT
Halo Velasquez

SPECIES
Canine

BREED
WH Terrier

SEX
Spayed Female

AGE
10.5 years

WEIGHT
17.6 lbs

INTERPRETED BY
Tam Mengine, DVM, DABVP (canine/feline practice)

IMAGING PERFORMED BY
Dr. Tam Mengine

HOSPITAL NAME
Stoney Creek VH

REFERRING VET
Dr. Tam Mengine

INVOICE
12698

DATE
4.6.23

PRESENTING CLINICAL SIGNS

History: Year+ history of vomiting occasionally, recently progressed to multiple times a day, and now 24 hrs of bloody diarrhea. Also recent increase in thirst. Modest weight loss. CBC / Chem / U/A unremarkable, Snap CPL normal, fecal parasite check pending

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is minimally distended with anechoic urine. While the wall appears thickened, this is likely a normal variation due to lack of distention. The ureteral papillae, trigone and pelvic urethra are of normal appearance, and the ureters are not visible (normal). No masses, calculi or mucosal irregularities are noted. Urethra visualized to 4.0 cm.

Both kidneys are hyperechoic, and exhibits poor cortico-medullary differentiation. There is mild dilation of the renal pelvis, with anechoic contents. There is no evidence of nephrolithiasis, mineralization, or hydronephrosis. The proximal ureters are not visible (normal). The left kidney is 5.1 cm in length. The right kidney is 3.7 cm in length.

Adrenal Glands

The adrenal glands are both identified in their normal locations. They are normal in size and shape with appropriate parenchymal echogenicity and normal phrenic vasculature. The left adrenal gland height is 4.5 mm at the cranial pole and 5.6 mm at the caudal pole. The right adrenal gland height is 5.2 mm at the cranial pole and 3.2 mm at the caudal pole.

Spleen

The spleen is of appropriate size and has a normal, homogenous parenchyma with a smooth, continuous capsular surface. The splenic vasculature is normal with no evidence of congestion or thrombosis, and blood flow through the splenic hilus appears normal.

Liver

The liver is of appropriate size and shape, with sharp borders and a mildly coarse parenchymal echotexture that is hypoechoic to the spleen. The portal and hepatic vasculature are of normal size and appearance with no evidence of congestion or thrombosis.

The gallbladder is moderately distended with anechoic contents. The wall was thin and continuous with no focal lesions. The cystic and common bile ducts are normal / not visible.

Gastrointestinal

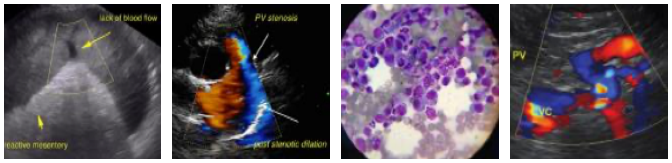
The stomach is empty, except for a small amount of hyperechoic material at the level of the pyloroduodenal junction. The gastric wall is subjectively normal in thickness (up to 5.0 mm) with normal deviations or the rugal folds. There is the appearance of ileus at the level of the pyloroduodenal junction, but no evidence of obstruction.

The small bowel has diffuse changes to the normal 1:3 muscularis to mucosa ratio. Wall measurements are normal up to 5.1 mm for duodenum and 3.9 mm for jejunum. Overall wall layering is preserved. The duodenal is diffusely corrugated with mucosal fogging. Intestinal motility appears normal.

The visible portions of the colon are of normal thickness, up to 1.7 mm, with intact wall layering. The ileocecal junction is visualized and appears normal.

Pancreas

The areas of the limbs and body of the pancreas are isoechoic to the surrounding mesenteric fat, with normal capsular appearance. There is no evidence of peripancreatic inflammation. The pancreatic duct appears normal.



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Free Abdomen

There is no evidence of free fluid within the peritoneal cavity. The mesenteric lymph nodes were moderately enlarged, up to 3.1 cm, with normal short to long axis ratio and appropriate echogenicity. The aortic trifurcation has normal blood flow with no evidence of thrombosis.

ULTRASONOGRAPHIC FINDINGS

Findings

- Bilateral chronic renal changes with pyelectasia
- Infiltrative bowel changes in jejunum and duodenum, with reactive mesentery lymph node
- Evidence of ileus, particularly at the pyloroduodenol junction

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The presence of pyelectasia raises the concern for pyelonephritis, though mild renal pelvic dilation can also be seen with recent fluid therapy or as a chronic degenerative change. Recommendations include:

- CBC, chemistry and urinalysis with culture
- Blood pressure measurement
- If pyelonephritis is suspected, then empiric antimicrobial therapy may be started while awaiting culture results. The International Society for Companion Animal Infectious Diseases (ISCAID) Working Group recommends fluoroquinolones or cefpodoxime as initial empiric treatment choices, with a total therapy duration of 10 - 14 days.
- Chronic cases of pyelonephritis may require longer courses of treatment than the recommended 10 -14 days. Historically, treatment for up to 4-6 weeks has been recommended, with follow up culture shortly after discontinuation of therapy.

The changes in the gastrointestinal tract are suggestive of infiltrative bowel disease, including both inflammatory bowel disease or low grade gastrointestinal lymphoma. Recommendations include:

- Fecal parasite testing and empiric fenbendazole treatment
- trials with a novel protein or hydrolyzed diet
- A complete GI panel, with cobalamin supplementation if indicated.
- A resting cortisol level is recommended, and can now be included as part of the GI panel to Texas A&M. Alternately a urine cortisol: creatinine ratio can be used to screen for hypoadrenocorticism
- Empiric therapy with prednisolone at 2-4mg / kg daily could be considered if a diet trial is unsuccessful.
- Definitive diagnosis would require biopsy of the affected tissue, ideally with intra-operative ultrasonographic guidance. If there is concurrent lymphadenopathy, ultrasound-guided sampling of the lymph node using a 25 or 22G needle could be considered.

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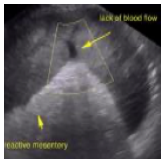
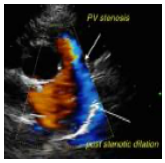
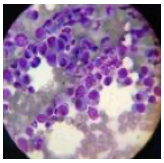
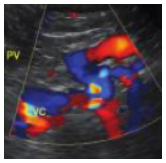

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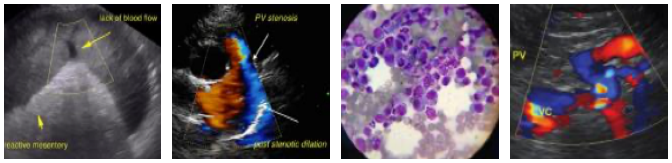

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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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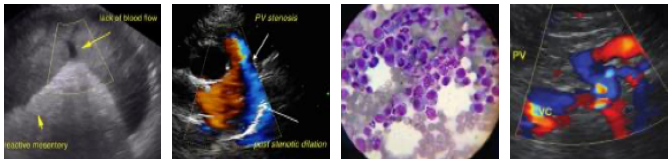

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