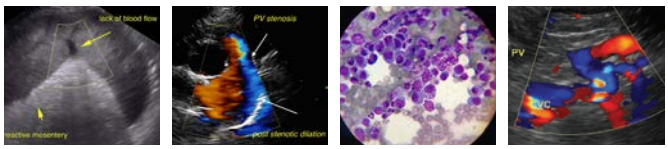
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT
Coconut Zoretic-Addeo

SPECIES
Canine

BREED
Yorkshire Terrier

SEX
Spayed Female

AGE
2 Years

WEIGHT
N/A

INTERPRETED BY
Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY
Kelly Vazquez

HOSPITAL NAME
Westwood Regional

REFERRING VET
Dr. Goldman

INVOICE
39993

DATE
8/1/22

PRESENTING CLINICAL SIGNS

Patient presents for vomiting flecks of blood, non-responsive to medical treatment. Current meds: metro, Benebac, Purina EN diet.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

The right kidney is normal in size (2.73 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed. A hyperechoic band parallel to the corticomedullary border is present.

The left kidney is normal in size (2.92 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed. A hyperechoic band parallel to the corticomedullary border is present.

Adrenal Glands

The right adrenal gland is normal in size (1.58 cm long x 0.60 cm at the cranial pole and 0.41 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (1.78 cm long x 0.30 cm at the cranial pole and 0.36 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Spleen

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

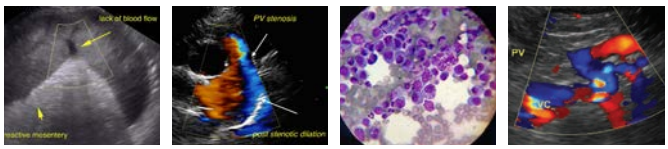
The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

Gastrointestinal

Fundic mucosal hypertrophy with hyperechoic mucosa and some mucosal remodeling is noted. There is no loss of mural detail. Layering is normal. There is mild luminal fluid accumulation. No evidence of masses/nodules or foreign material present.

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions



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per min). The lumen of the small intestine is largely empty. However, the proximal duodenum is mildly thick with normal layering maintained, and mildly echogenic fluid and chyme/mineral debris/sand distended. There is no evidence of plication or obstructive pattern to signify foreign body and/or obstruction present at this time.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of free peritoneal effusion noted in these images.

There is no apparent lymphadenopathy noted in these images.

PRIMARY FINDINGS

- **Gastritis –** Consistent with irritation secondary to dietary indiscretion or intolerance, infection (bacterial, viral, other), parasitic or protozoal disease, toxin, other metabolic disease such as pancreatitis, other. Microulceration cannot be ruled out.

- Mildly thick and mildly distended duodenum with contents consistent with normal ingesta, possibly gravel or sand debris. However, there is no evidence of an obstructive pattern, plication, or other foreign material present.

SECONDARY FINDINGS

- **Medullary rim sign -** This finding is of unknown clinical significance and can be a normal variant, often idiopathic. Medullary rim sign can be present with renal disease including FIP, lymphoma, hypercalcemic nephropathy, Leptospirosis, tubular disease, other and should be interpreted in combination with other more specific indications of kidney disease such as isosthenuria, proteinuria, azotemia, etc. This is a common incidental finding in patients with diabetes mellitus.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The appearance of the proximal gastrointestinal tract in these images is most consistent with acute gastroenteritis/duodenitis, possibly secondary to dietary indiscretion, parasitic disease, or other (infectious, bacterial, viral, etc.) cannot be ruled out. Foreign material cannot be definitively ruled out, but is considered less likely, and at this time there is no evidence of plication, an obstructive pattern, etc. to indicate the presence of an obstruction.

Recommendations include a CBC/Chem panel with electrolytes and urinalysis recommended if not recently evaluated.

A fecal exam if not recently evaluated as well as a fecal enteropathogen PCR panel to Texas A&M GI Laboratory for further evaluation of possible infectious disease.

A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

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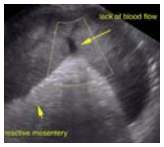
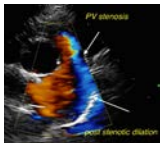
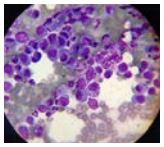
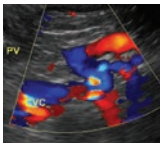

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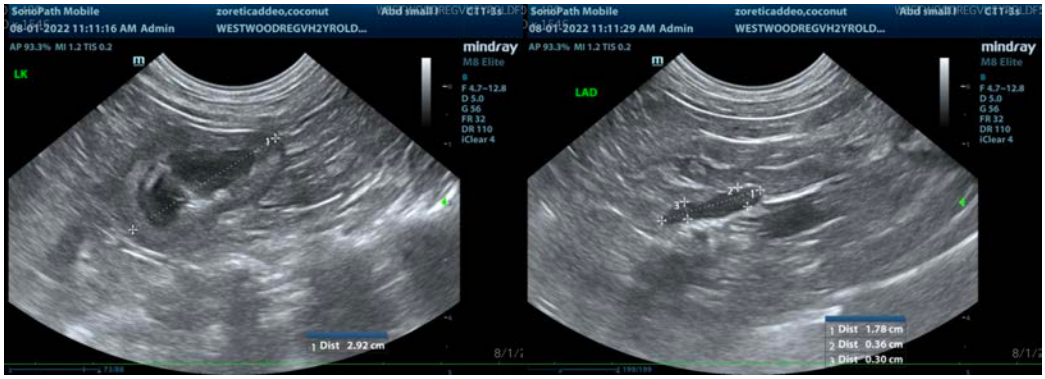
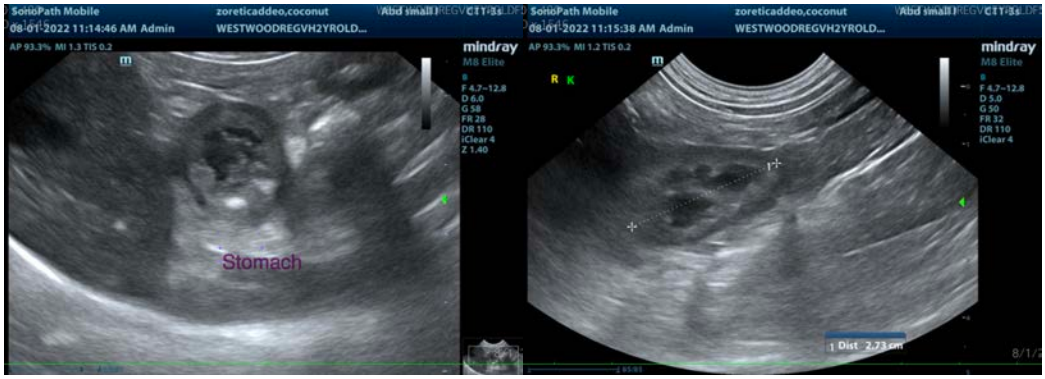
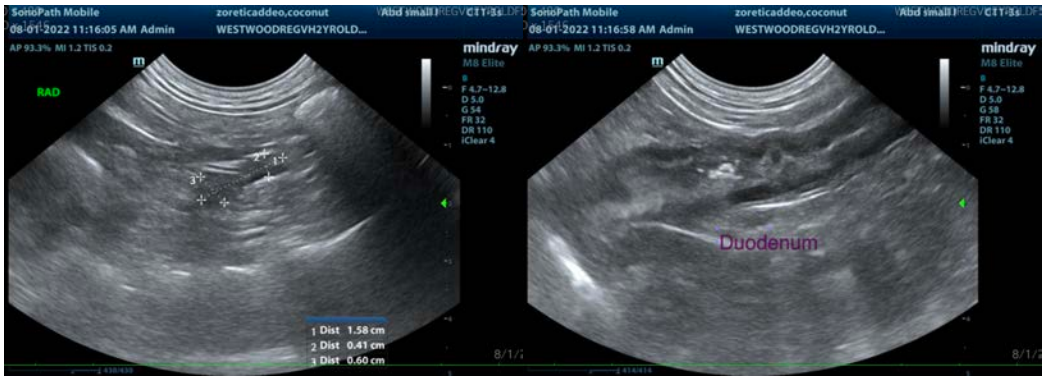
In the meantime, in addition to supportive symptomatic medical management of gastrointestinal signs, empirical deworming with a 5-day course of Panacur is recommended. If not already being administered, antiemetics and gastroprotectants including Sucralfate are recommended in addition to the deworming and a bland, easy to digest diet. If clinical signs do not improve with supportive symptomatic medical management, recheck imaging is recommended to definitively rule out an early or emerging or partial obstruction, and/or gastroscopy, endoscopy could be considered for further evaluation of gastric and duodenal mucosa, and biopsies of the tissue.







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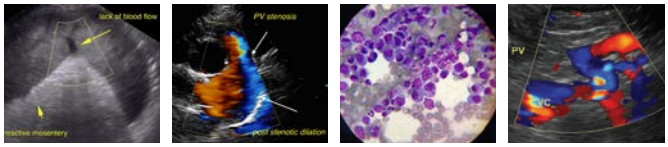

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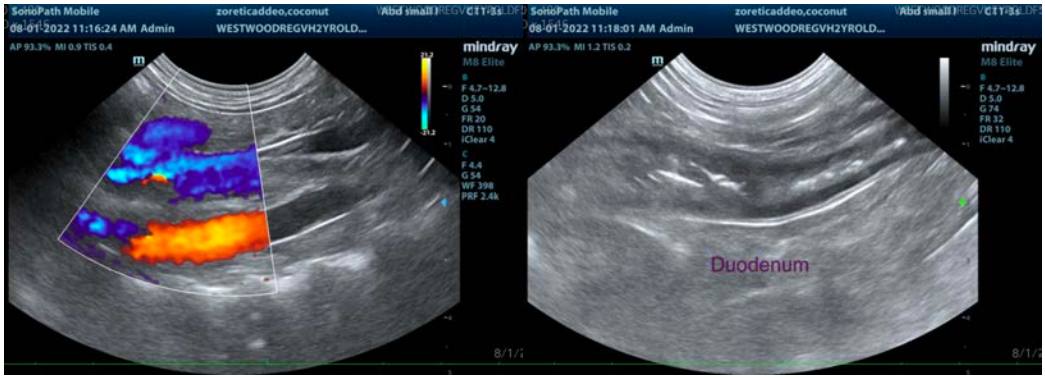

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Beth Johnson, DVM, DACVIM
Beth.Johnson@sonopath.com