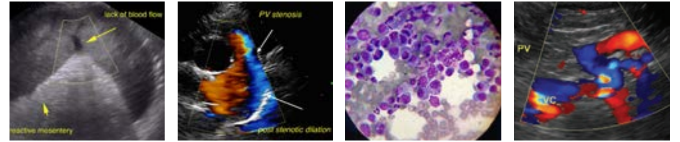

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1-800-838-4268 info@sonopath.com

PATIENT

Meeko Holloman

SPECIES

Canine

BREED

Yorkie

SEX

Intact Male

AGE

8 Years

WEIGHT

1.5 kg

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Erin Wicks

HOSPITAL NAME

Shores VEC

REFERRING VET

Dr. Zippay

INVOICE

42446

DATE

11/2/22

PRESENTING CLINICAL SIGNS

Presented at our hospital for other day started vomiting and diarrhea, rDVM yesterday and got SQ fluids, cerenia inj, cerenia to go home, and flagyl, was being treated for worms in Aug from a plant was a weeks treatment, diarrhea is dark in color Previous Health Concerns: Aug- worms from plant- treated, liver shunt Current Medications: flagyl- 2pm Appetite/When did they eat last: yesterday

Abnormal PE/Chem/CBC/UA Results: Cardiovascular: 1/6 murmur Abdominal: severely distend stomach with gas /fluid; painful to palpate epoc: K+ 3.1 ca 1.03 gluc 59 Cpl: abdnormal Rad: SEVERELY distended stomach with fluid gas and granular ingesta?; gas distended colon and possible section of small bowel

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 prostate is unable to be well visualized in these images.

The right kidney is normal in size (3.35 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 or infarcts observed. Non-obstructive areas of mineralization/nephroliths are noted.

The left kidney is normal in size (3.0 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 or infarcts observed. Non-obstructive areas of mineralization/nephroliths are noted.

Adrenal Glands

The right adrenal gland is unable to be well visualized in these images.

The left adrenal gland is normal in size (1.4 cm long x 0.28 cm at the cranial pole and 0.37 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

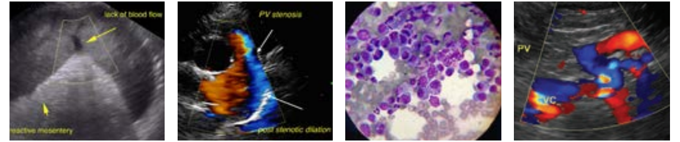
Spleen

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.



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Gastrointestinal

The visible stomach wall is normal in thickness and layering. The stomach is moderately distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease. However, given the reported history of fasting, delayed gastric emptying could be considered. Soft (cloth) fluid absorbing foreign material is considered less likely but cannot be definitively ruled out. If clinical signs are consistent (vomiting, etc.), recommendations include supportive medical care, 24 hours fasting and re-image.

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 per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

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.

ULTRASONOGRAPHIC FINDINGS

- Non-obstructive nephrolithiasis bilaterally
- Full stomach – This should be interpreted in combination with clinical signs and when the patient last ate.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given this patient's history of a portosystemic shunt combined with the gastrointestinal signs and hypoglycemia, bile acids are recommended if not recently evaluated.

Given the hypocalcemia combined with gastrointestinal signs, further evaluation of gastrointestinal tract function is recommended with A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory.

Additionally, especially given the hypoglycemia, a baseline cortisol is recommended. If baseline cortisol is less than 2, a full ACTH stimulation test is recommended to rule out hypoadrenocorticism.

While the appearance of the stomach is most consistent with normal ingesta, foreign material can't be ruled out. Therefore, while providing supportive/symptomatic medical management in the form of fluid therapy, antiemetics, gastroprotectants, etc., ideally parenterally, fasting for another 12-24 hours is recommended with recheck imaging (x-rays and/or recheck ultrasound) to help better evaluate the stomach and gastric contents if they remain.

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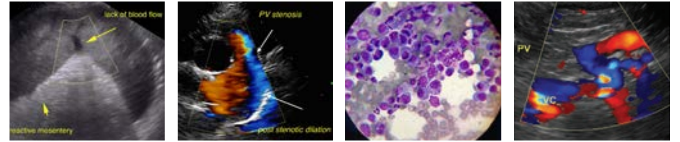

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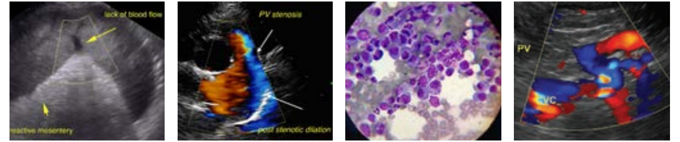

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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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