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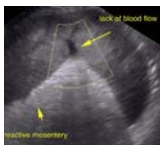
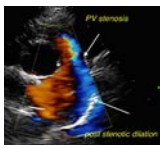
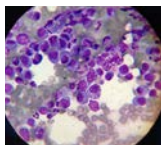
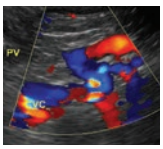

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1-800-838-4268 info@sonopath.com

**PATIENT**
Ladybug Chipman

**SPECIES**
Canine

**BREED**
Pit X

**SEX**
Female

**AGE**
4 Years

**WEIGHT**
23.2 kg

**INTERPRETED BY**
Beth Johnson, DVM
DACVIM

**IMAGING PERFORMED BY**
Dr. Brittany Gardner

**HOSPITAL NAME**
Wilvet Salem

**REFERRING VET**
Dr. Brittany Gardner

**INVOICE**
44498

**DATE**
1/25/23

## PRESENTING CLINICAL SIGNS

48hrs p has been having bloody diarrhea, vomiting, not wanting to eat. O described diarrhea as liquid, gelatinous, bloody. P going out frequently and straining to defecate, blood dripping out sometimes. Vomited 3-4x. O said p seems uncomfortable, restless, slightly lethargic. P lives on a farm, has access to chickens and sheep. Hx of getting into garbage and other things they shouldn't. Fecal done at RDVM yesterday, negative.

Abnormal PE/Chem/CBC/UA Results: 1. bloody diarrhea 2. Vomiting 3. anorexia CBC: HCT 41.7% WBC 9.53 neuts 7.25 plts 22K PCV/Ts 46/9.2 Manual plt count: 195K- 260K- adequate Chem 10: alb 4.0 EPOC: HCT 39 pH 7.326 lytes wnl A/T FAST: No FF, no obvious pyometra Fecal direct: No flukes seen Cerenia 1mg/kg SQ

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

Urinary bladder is only mildly distended (empty). Visible contents are anechoic. Urinary bladder wall is unable to be fully assessed for pathology without further distension. No visible masses or cystoliths are observed. The trigone and visible pelvic urethra are normal thickness with a smooth mucosal surface. If there are urinary signs and/or concern for urinary bladder pathology, reassessment after complete filling is recommended.

The right kidney is normal in size (5.4 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.

The left kidney is normal in size (5.9 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.

### *Adrenal Glands*

The left adrenal gland is small (flattened contour). Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. The left adrenal gland measures 0.42 cm at the cranial pole and 0.47 cm at the caudal pole.

The right adrenal gland is not well visualized in these images, potentially owing to a small size, given the appearance of the left adrenal gland.

### *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.

Gallbladder is moderately distended with anechoic bile as well as mild suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

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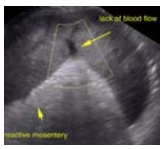
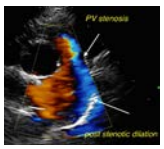
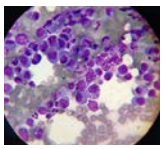
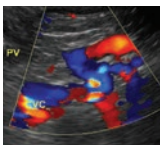

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### *Gastrointestinal*

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

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.

In the caudal abdomen, there is a focal bowel loop, mildly fluid distended, that can't be definitively traced to small or large bowel but appears most consistent with a mildly fluid dilated colon.

### *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.

The mesenteric lymph nodes are prominent in size with swollen capsular contour. Normal elongated shape (length to width ratio) is maintained. There is no loss of parenchymal detail.

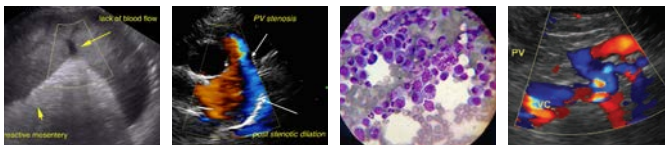
No visible reproductive tract pathology is noted in these images.

## PRIMARY FINDINGS

- **Flat adrenal glands** – This can be a normal patient variant and/or a sign of exogenous cortisol administration. If exogenous steroids are not being administered, hypoadrenocorticism (either relative or absolute) should be considered.
- **Reactive mesenteric lymph nodes –** infiltrative neoplastic disease cannot be ruled out but is considered less likely.
- **Focally fluid dilated bowel in the caudal abdomen** – This appears to be colon, which is most consistent with this patient's clinical history. However, it can't be definitively traced to small or large bowel, so a focally dilated small bowel loop can't be definitively ruled out. Regardless, there is no visible evidence of foreign material or obvious obstructive pattern noted in these images.

## SECONDARY FINDINGS

- **Gallbladder debris -** Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should



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be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

A baseline cortisol is recommended. If baseline cortisol is less than 2, a full ACTH stimulation test is recommended to rule out hypoadrenocorticism.

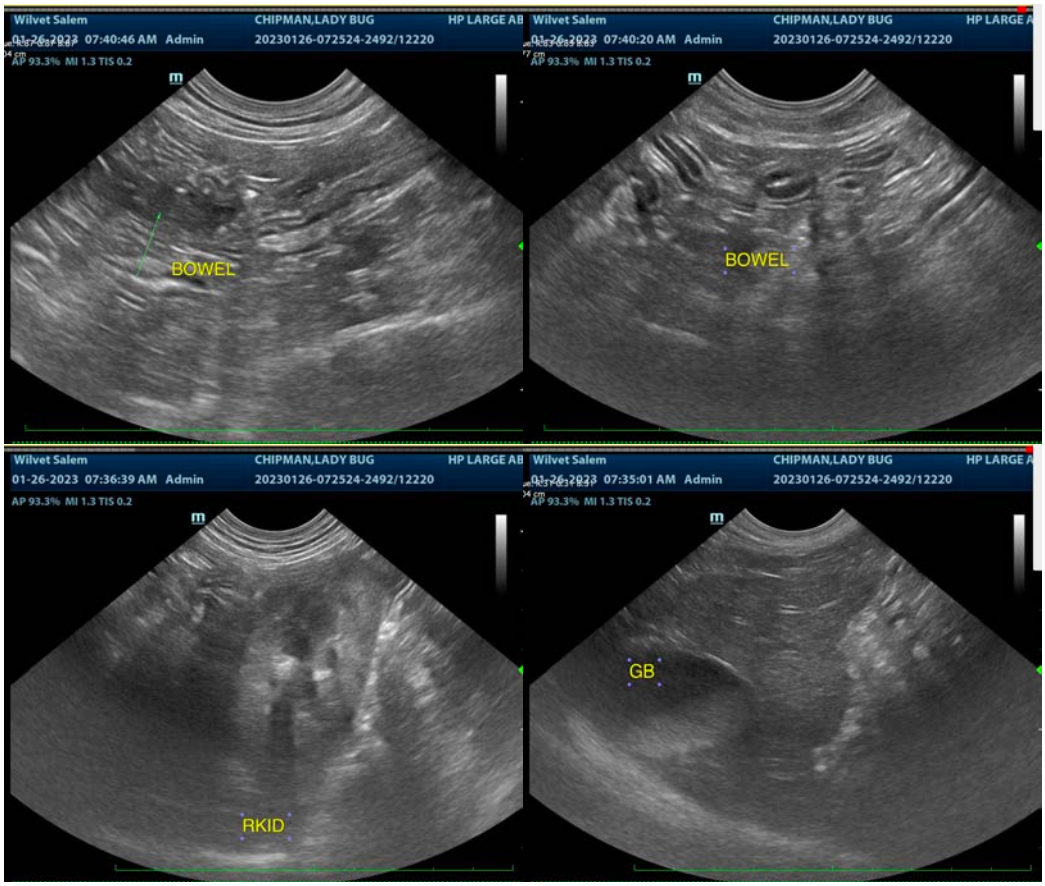
A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

A fecal exam is recommended if not recently evaluated, as is a fecal enteropathogen PCR panel to Texas A&M GI Laboratory.

In the meantime, supportive/symptomatic medical management of clinical signs and potentially hemorrhagic gastroenteritis is recommended with antiemetics, gastroprotectants, probiotic such as Visbiome or Proviable, empirical deworming with a 5-day course of Panacur +/- an antibiotic such as Metronidazole or Tylosin.

Additionally, if tolerated, transition in diet (likely short term) either to a bland, easy to digest diet or potentially fiber responsive colitis diet could be considered.

If clinical signs persist and a diagnosis is not obtained from the above recommended diagnostics, recheck imaging is recommended, at which time tracing the dilated bowel loop (if still present) to normal appearing bowel would be ideal.



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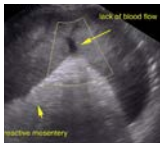
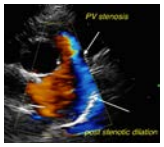
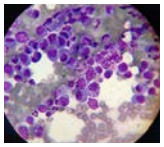
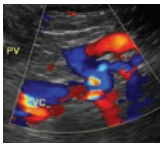

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**The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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