

**PATIENT**

Ebba Waltman

**SPECIES**

Canine

**BREED**

Bloodhound

**SEX**

FS

**AGE**

10 years

**WEIGHT**

91 lbs

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING PERFORMED BY**

Pamela Harrigan,  
RDCS

**HOSPITAL NAME**

New England  
Veterinary Center

**REFERRING VET**

Dr. Arynne Mundorf

**INVOICE**

11765

**DATE**

4/22/2026

**PRESENTING CLINICAL SIGNS**

Recent vomiting and diarrhea. Appetite OK. Abdomen slightly tense on palpation; no specific area of pain or discomfort. Treated for gastroenteritis with metronidazole, panacur, fortiflora. Symptoms have resolved. Abdominal radiographs: decreased detail in the mid-abdomen on left lateral projection, raising suspicion for splenic positioning vs potential mass. AFAST revealed multiple hyperechoic areas along the splenic hilus. Comprehensive ultrasound was recommended.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

*Urinary System*

The urinary bladder is adequately 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 is size (6.07 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 is size (7.8 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 right adrenal gland is normal in size (0.68 cm at cranial pole and 0.46 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.43 cm at cranial pole and 0.47 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

*Spleen*

Spleen is generally normal in size and shape with a smooth capsular contour. Parenchyma is diffusely nodular in appearance characterized diffusely by small discrete hypoechoic nodules. Additionally, multifocal discrete homogenous, hyperechoic nodules are noted along the medial border of the spleen. Splenic vasculature appears normal.

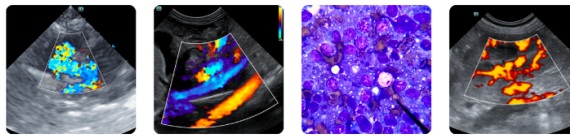
*Liver*

Liver is subjectively enlarged with mildly irregular margins. Parenchyma is mildly heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion.

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

*Gastrointestinal*

The stomach in some views appears thick measuring 0.96 cm thick with a subtly hypoechoic appearance to the wall, but intact layering. In other views, the thickness is less prominent. Some



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hindrance of evaluation is present due to the very large amount of intraluminal non-shadowing echogenic contents consistent with ingesta or a full stomach.

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The visible small intestine demonstrates areas of moderate to severely thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). Small intestinal submucosa is slightly irregular, thick and hyperechoic, without evident loss of layering appreciated. The lumen of the small intestine is empty with no evidence of obstruction or foreign material.

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

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The pancreas that is observed appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

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**Free Abdomen**

There is no visible free peritoneal effusion noted in these images.

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There is no apparent pathologic lymphadenopathy noted in these images.

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**ULTRASONOGRAPHIC FINDINGS**

- Moderate inflammatory bowel disease (IBD) pattern – Thick muscularis has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma. No loss of layering or distinct characteristics of malignancy are present. Therefore, differentials cannot be further ranked without tissue sampling.
- The suspected concurrent gastric wall thickening could similarly represent either a benign process or infiltrative neoplasia which can't be differentiated without tissue sampling.
- Mildly heterogenous liver – These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia.
- Moderate 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 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.
- Splenic micronodular hyperplasia pattern with hyperechoic splenic nodules – This nodular change is often associated with benign aging nodular hyperplasia. Infiltrative neoplasia, however, including both early hemangiosarcoma as well as round cell neoplasia cannot be ruled out. The hyperechoic splenic nodules most consistent with benign myelolipomas. Other differentials such as fibrosis or calcification caused by old hematomas or infarcts, chronic

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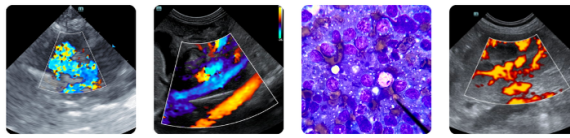
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inflammation, granulomatous disease or metastatic disease cannot be ruled out, but are considered less likely.

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.

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Fine needle aspirates of the spleen +/- liver and potentially gastric wall if it can safely be reached, could all be considered if patient's coagulation status is appropriate.

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Additionally, in the meantime, A routine fecal/giardia exam is recommended if not recently evaluated.

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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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A fecal enteropathogen PCR panel to Texas A&M GI Laboratory could be considered for further evaluation of possible infectious disease. Contact lab for recommendations on how long to discontinue antibiotics (if indicated) prior to obtaining a stool sample for submission.

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

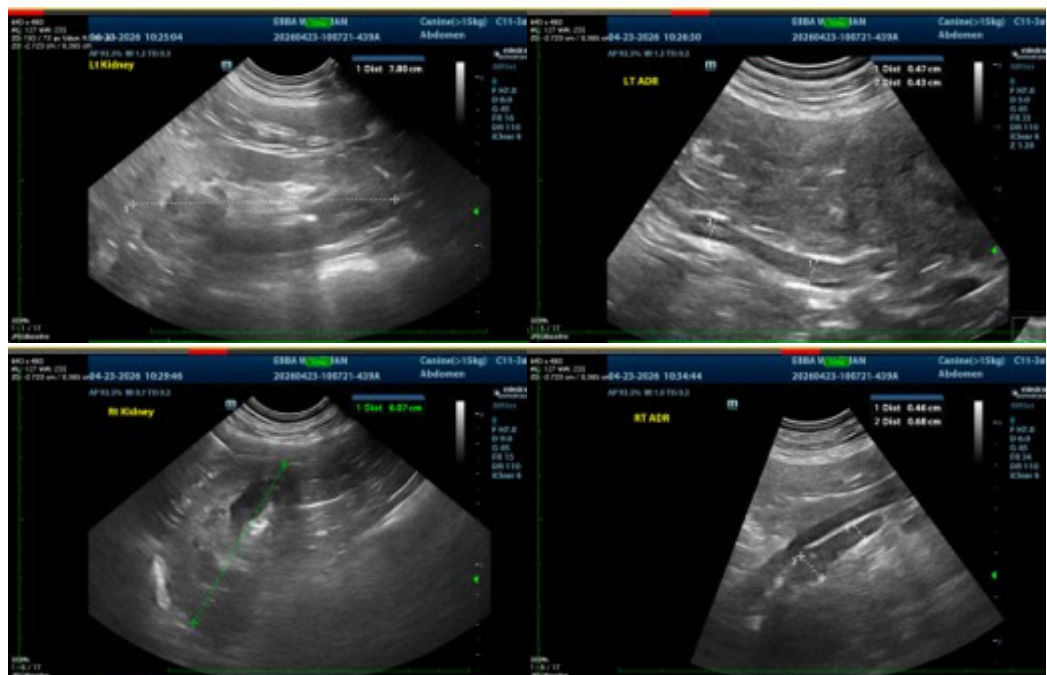
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Additional therapeutic recommendations may not be needed given patient's reported clinical resolution but if elected, if tolerated, a transition in diet is recommended, based on trial-and-error response.

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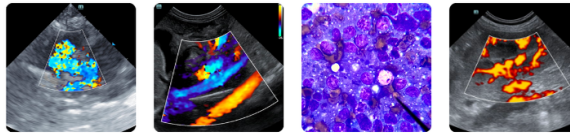
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Some options to consider include a gastrointestinal biome diet vs a hydrolyzed protein diet (sometimes several trials with different brands are necessary) vs a fiber response/colitis diet vs a bland, easy to digest or low-fat diet vs other.



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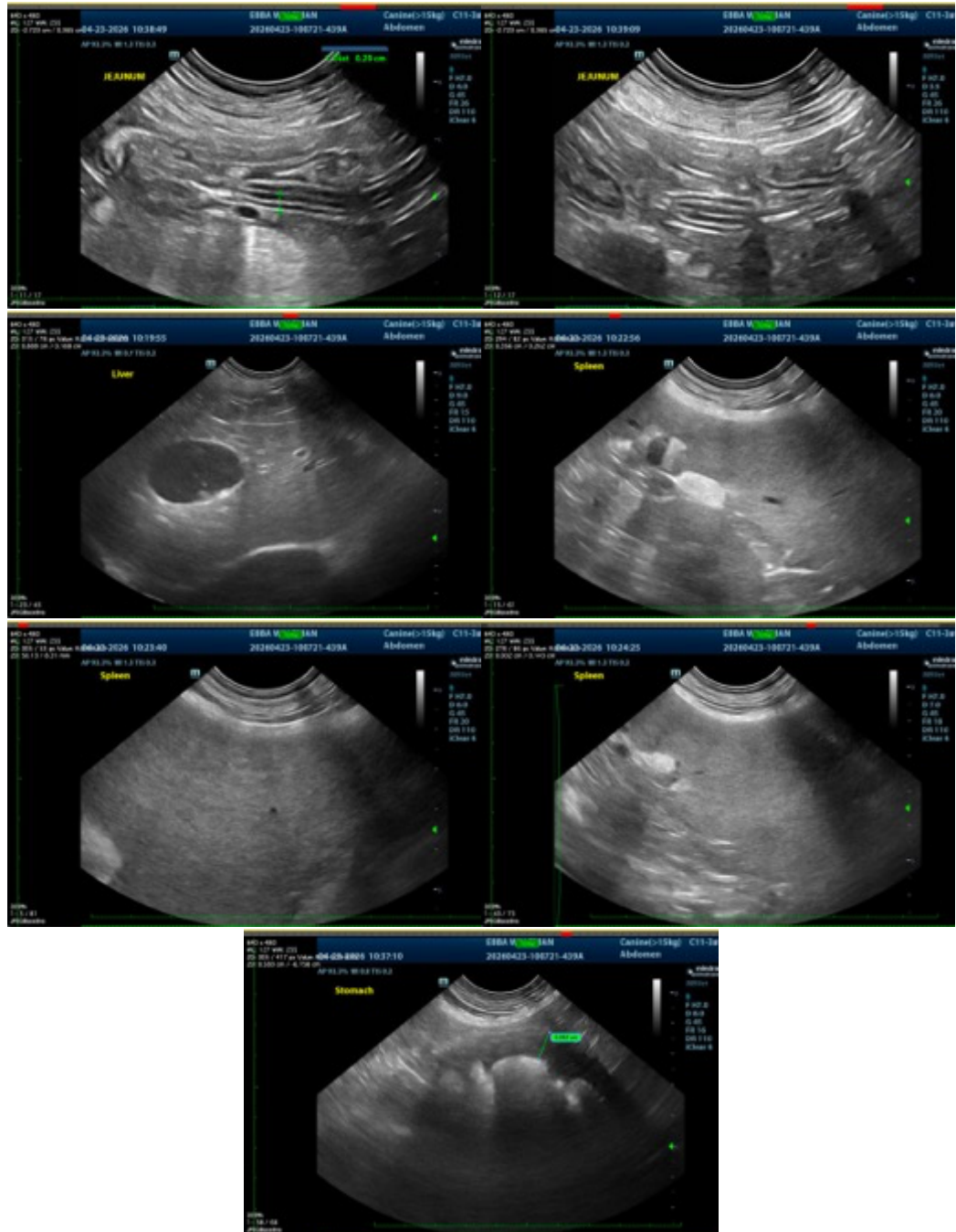
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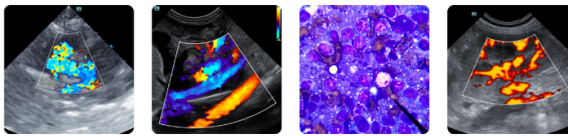
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.





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