



## PATIENT

Murphy Mussman

## SPECIES

Canine

## BREED

Chow X

## SEX

Neutered Male

## AGE

8 Years 11 Months

## WEIGHT

54.4

## INTERPRETED BY

Beth Johnson, DVM,  
DACVIM (SAIM)

## IMAGING PERFORMED BY

A. Murphy, CVT

## HOSPITAL NAME

Wauwatosa VC

## REFERRING VET

Dr. Elaine Binor, DVM

## INVOICE

35510

## DATE

1/19/26

## PRESENTING CLINICAL SIGNS

History of diarrhea, small scant feces the last 3-4days. Acting painful and hunched over ATO today. Midabdominal palpation- possible FB/mass. Imaging to check for FB or abdominal mass. Mucus membranes are pale-pink. Concern for neoplasia or FB. Normal CBC/Chem. Negative fecal.

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

Urinary bladder is adequately distended with anechoic contents. No masses, inflammatory changes, or echogenic sediment are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface. Several punctate mineral densities are noted within the trigone of the urinary bladder, measuring between 0.3 cm and 0.4 cm in size.

Prostate is unable to be well visualized in these images.

Left kidney is normal in size (6.0 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, mineral or infarcts observed.

Right kidney is normal in size (6.0 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, mineral or infarcts observed.

### *Adrenal Glands*

The adrenal glands are unable to be well visualized in these images.

### *Spleen*

Spleen is subjectively large in size (2.0 cm thick at the hilus) 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. The spleen is folded upon itself, which is a positional non-pathologic variant.

### *Liver*

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 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. Some mineral/sand debris is suspected with no visible evidence of obstruction noted.

### *Gastrointestinal*

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.



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The visible small intestine demonstrates areas of mildly 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.

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

### *Pancreas*

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.

### *Free Abdomen*

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

There is no apparent pathologic lymphadenopathy noted in these images.

## ULTRASONOGRAPHIC FINDINGS

### Primary Findings

- Mild/emerging inflammatory bowel disease 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.
- Mild splenomegaly- can be associated with congestion caused by sedation (if sedated) but can also be associated with diffuse infiltrative disease. Both benign conditions such as extramedullary hematopoiesis, lymphoid hyperplasia, as well as infiltrative neoplastic diseases such as round cell neoplasia should be considered.

### Secondary Findings

- Mild 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. Some mineral/sand debris with no visible evidence of obstruction is suspected.
- Multiple small urinary bladder cystolith suspected

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is no definitive ultrasonographically visible evidence of a mass in these images at this time. Further gastrointestinal work up recommendations, given the patient's history, and the changes noted above, include:

- A routine fecal/Giardia exam is recommended, if not recently evaluated.



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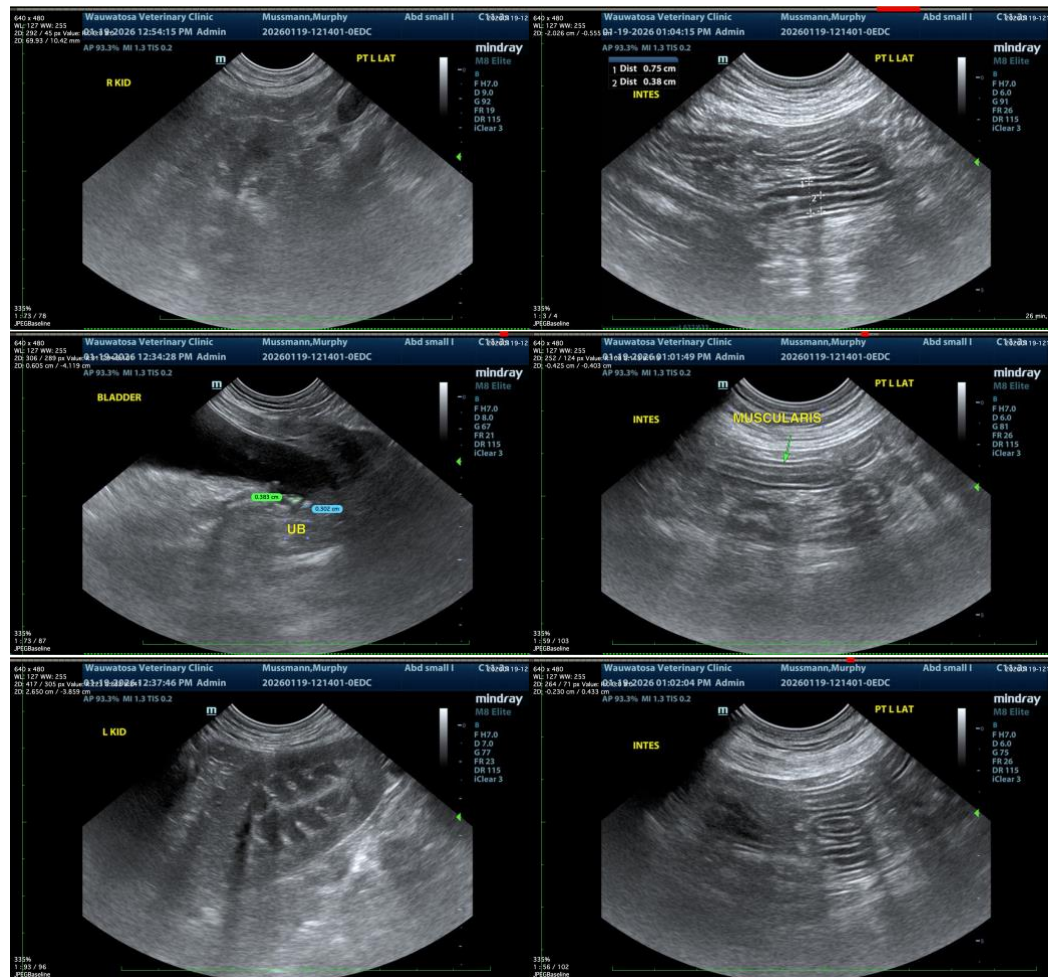
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- A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.
- A fecal enteropathogen PCR panel to Texas A&M GI Laboratory could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

In the meantime, supportive/symptomatic medical management of clinical signs is recommended, including a probiotic (such as visbiome or proviable), empirical deworming with a 5-day course of Panacur and, if tolerated, a transition in diet, based on trial-and-error response, beginning possibly with a gastrointestinal biome diet vs a hydrolyzed protein diet vs other. Some patients respond to one brand/version of a hydrolyzed protein diet better than another brand, so several brand attempts may be required.

Ultimately, if a diagnosis is not made, and clinical signs persist, biopsies of the GI tract, being sure to include ileum, if possible, may be necessary for a definitive diagnosis, and therefore to further guide medical management.





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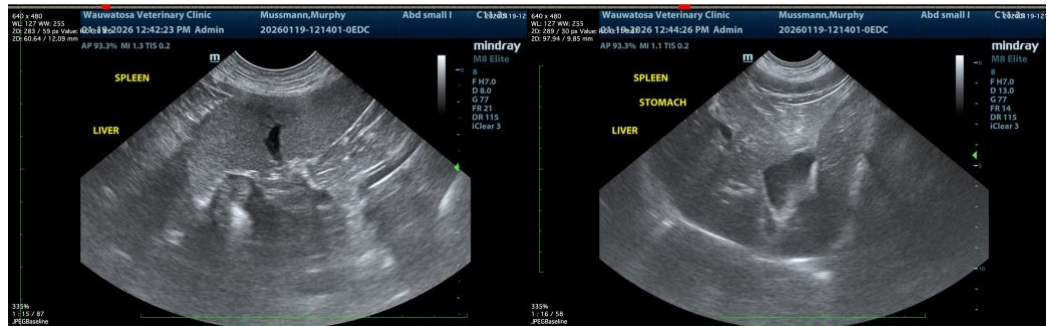
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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**

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