



**PATIENT**

Duncan Musser

**SPECIES**

Canine

**BREED**

Yorkie Poo

**SEX**

Neutered Male

**AGE**

14 Years

**WEIGHT**

9.1 Pounds

**INTERPRETED BY**

Jessica Midence, DVM,  
DACVIM (SAIM)

**IMAGING PERFORMED BY**

Dr. Meghan Myers

**HOSPITAL NAME**

Hershire AH

**REFERRING VET**

Dr. Brett Wood

**INVOICE**

45340

**DATE**

2/16/23

**PRESENTING CLINICAL SIGNS**

Pet originally presented about 3 weeks ago for vomiting and decreased appetite, soft stool, Was found to have a tooth root abscess and was rx cerenia and clindamycin. Tooth infection appeared to have resolved and vomiting improved. Blood work showed a regenerative anemia (pcv 30%). Appetite remained slightly decreased and pet seemed mildly lethargic. Repeat cbc 1 week post initial showed same degree of anemia and regeneration. fecal occult blood test positive dr. started on prednisone (1mg/kg/day over a tapering 2 week period). Owner reports pet is doing better on prednisone with appetite and activity but continues to have soft sometimes diarrhea stools.

Abnormal PE/Chem/CBC/UA Results: fecal occult blood: positive cbc: pcv: 30%, regenerative with increased retics and nRBC bun mildly elevated: 39 albumin normal.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder mucosa, trigone, and visible urethra are normal in thickness and there is no evidence of mucosal irregularities. The bladder lumen is distended with small volume of anechoic urine and bladder thickness is considered normal for volume of urine. No masses, inflammatory changes or calculi are observed.

The left kidney is normal in size, shape and architecture with smooth peripheral margins and measures 4.2 cm. There is moderately decreased corticomedullary distinction and normal echogenicity. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Multiple cortical cysts are noted, the largest of which measures 0.35 cm x 0.27 cm.

The right kidney is normal in size, shape and architecture with smooth peripheral margins and measures 4.2 cm. There is moderately decreased corticomedullary. distinction and normal echogenicity. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Multiple cortical cysts are noted.

**Adrenal Glands**

The left adrenal gland is normal in size (0.49 cm at the caudal pole and 0.42 cm at the cranial pole). The left adrenal gland has normal shape and it is normal in appearance and echogenicity.

The right adrenal gland is normal in size (0.32 cm). The right adrenal gland has normal shape and it is normal in appearance and echogenicity.

**Spleen**

The spleen measured significantly thick at 2.6 cm and was mildly hypoechoic with coarse echotexture. The capsule is smooth with no irregularities. Echogenic blood flow noted in the splenic vein, suggesting that the blood is turbulent. This can be seen with dehydration, significant intravascular inflammation (e.g., IMHA), or significant splenic disease.

**Liver**

The liver is significantly enlarged, diffusely hyperechoic, has rounded edges and an undulating peripheral margin. There are reduced portal markings secondary to the hyperechoic hepatomegaly. There is a hyperechoic nodule that measures approximately 1.0 cm x 0.65 cm and has slightly indistinct borders. The visible portions of the vasculature and biliary tract appear normal. No pathological hepatic lymphadenopathy observed.



**PATIENT**

Duncan Musser

The gallbladder lumen is significantly distended. The wall is a normal thickness and smooth. There is a significant amount of hyperechoic and echogenic non-dependent adherent debris that is attempting to organize. The cystic and common bile ducts are normal/not visible.

**SPECIES**

Canine

**Gastrointestinal**

**BREED**

Yorkie Poo

The gastric lumen is empty. The stomach wall is of normal wall thickness with some variability due to rugal folds. There is normal gastric wall layering. There are no masses or focal lesions observed and the pyloric outflow tract appears patent.

**SEX**

Neutered Male

The visualized areas of duodenum, jejunum and ileum appear normal in thickness. The duodenum measures normal with distinct wall layering. The remainder of the small intestines also measures normal with normal wall layering. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material. No focal lesions observed. In certain loops of bowel there are subtle hyperechoic mucosal speckles.

**AGE**

14 Years

Sections of colon are visualized with formed fecal material and gas shadowing distally. The colon measures normal. There is no observed focal or generalized colon wall thickening or loss of layering.

**WEIGHT**

9.1 Pounds

**Pancreas**

The area of the pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid. The visible pancreatic duct was normal.

**INTERPRETED BY**

Jessica Midence, DVM,  
DACVIM (SAIM)

**Free Abdomen**

There is scant effusion at the caudal edge of the spleen. No enlarged lymph nodes were seen. Generally, the mesentery is hyperechoic, particularly around the head of the spleen and the liver.

**IMAGING PERFORMED BY**

Dr. Meghan Myers

**PRIMARY FINDINGS**

- Significant hepatosplenomegaly with a hyperechoic liver nodule

**HOSPITAL NAME**

Hershire AH

**SECONDARY FINDINGS**

- Moderate chronic renal degenerative changes
- Significant gallbladder debris attempting to organize
- Mucosal speckling of certain loops of bowel
- Scant effusion

**REFERRING VET**

Dr. Brett Wood

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**INVOICE**

45340

The liver and spleen are both significantly enlarged and have a coarse echotexture. While these changes could represent significant EMH, given the anemia, round cell neoplasia (e.g., large cell lymphoma or mast cell tumor) is of concern. Fine needle aspirate is recommended to evaluate for this possibility.

**DATE**

2/16/23

There are no enlarged abdominal lymph nodes that would solidify a suspicion of lymphoma based on this ultrasound, but the patient is taking corticosteroids, which can alter the appearance of lymphadenomegaly. Regardless, the liver and spleen are concerning for infiltrative disease and worth aspirating.

The mucosal speckling of the intestines is something that can be associated with protein losing enteropathy or other chronic enteropathies, though if there is not a history or lab work to support a chronic enteropathy, then these changes could be a variation of normal.



**PATIENT**

Duncan Musser

There is a significant amount of hyperechoic adherent echogenic debris within the gallbladder that appears to be attempting to organize. Consider Ursodiol therapy once the patient is feeling well, and if it is not contraindicated for this patient.

**SPECIES**

Canine

The changes to the kidney represent moderate degenerative changes to the kidneys, and although they are normal in size, urinalysis is recommended along with serial monitoring of renal values.

**BREED**

Yorkie Poo

**SEX**

Neutered Male

**AGE**

14 Years

**WEIGHT**

9.1 Pounds

**INTERPRETED BY**

Jessica Midence, DVM,  
DACVIM (SAIM)

**IMAGING PERFORMED BY**

Dr. Meghan Myers

**HOSPITAL NAME**

Hershire AH

**REFERRING VET**

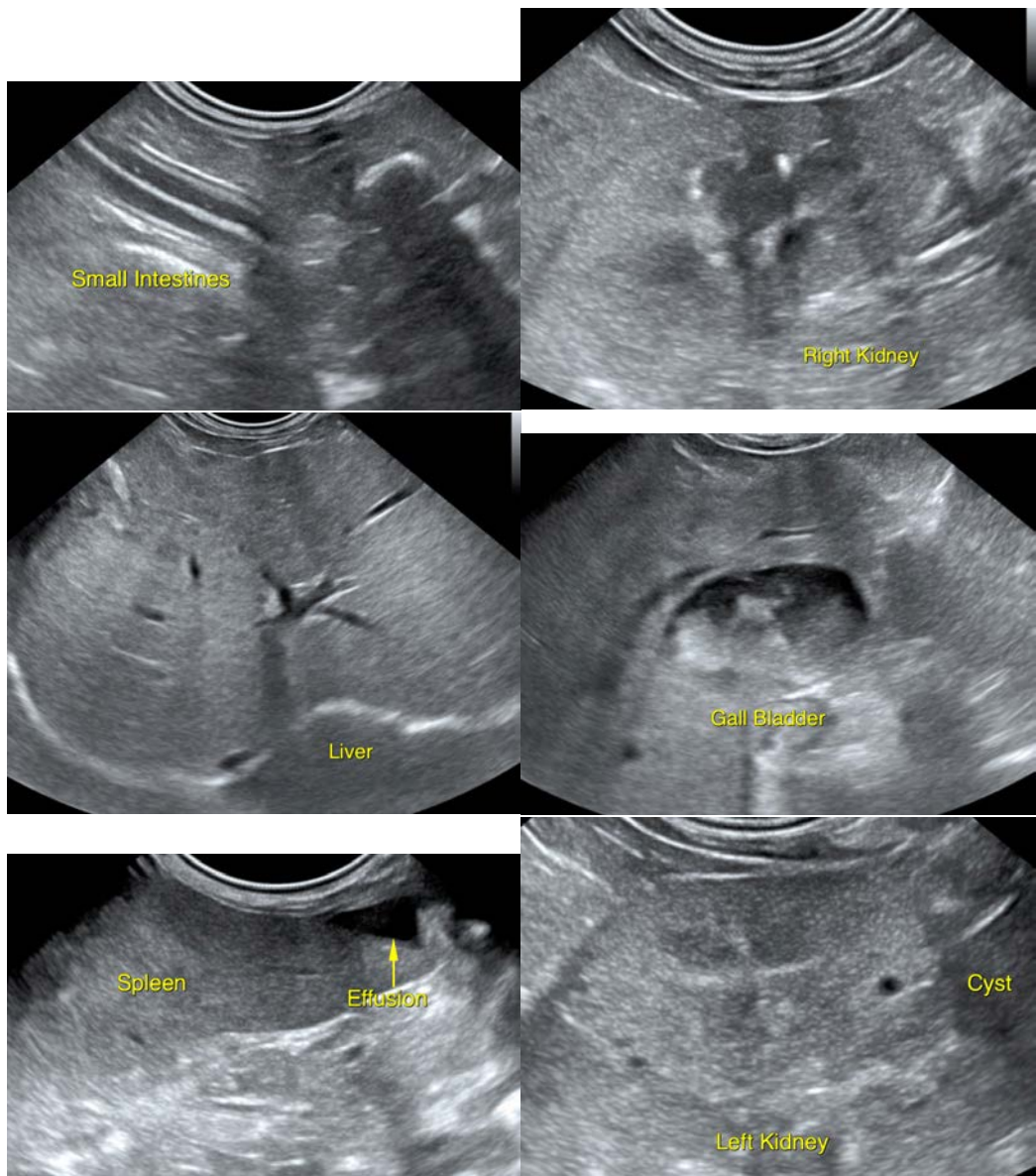
Dr. Brett Wood

**INVOICE**

45340

**DATE**

2/16/23





**PATIENT**

Duncan Musser

**SPECIES**

Canine

**BREED**

Yorkie Poo

**SEX**

Neutered Male

**AGE**

14 Years

**WEIGHT**

9.1 Pounds

**INTERPRETED BY**

Jessica Midence, DVM,  
DACVIM (SAIM)

**IMAGING PERFORMED BY**

Dr. Meghan Myers

**HOSPITAL NAME**

Hershire AH

**REFERRING VET**

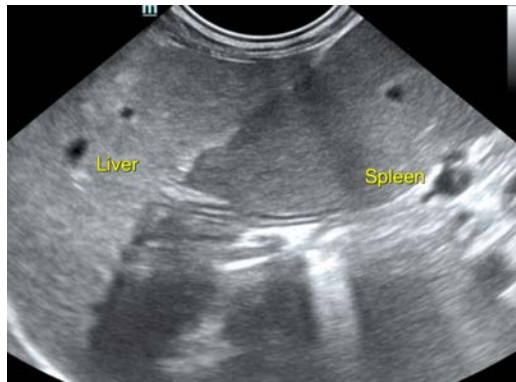
Dr. Brett Wood

**INVOICE**

45340

**DATE**

2/16/23



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.

Jessica Midence, DVM, DACVIM (SAIM)

[info@SonoPath.com](mailto:info@SonoPath.com)