

**PATIENT**

Mo Hamilton

**SPECIES**

Feline

**BREED**

Domestic shorthair

**SEX**

Male, neutered

**AGE**

11 Yrs.

**WEIGHT**

14 lbs.

**INTERPRETED BY**

Andrea Nicastro, DVM,  
Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**IMAGING PERFORMED BY**

Sara Hansen

**HOSPITAL NAME**

West Salem AC

**REFERRING VET**

West Salem AC

**DATE**

2/22/22

**INVOICE**

13031

**PRESENTING CLINICAL SIGNS**

History: Chronic vomiting: r/o IBD vs food allergy vs abdominal mass vs CKD vs hyperthyroid  
Abdominal radiographs- 3 views. No masses or obstructions noted. Spleen visible in left abdomen, potentially enlarged. Significant intra-abdominal fat present. SI empty, walls appear mildly thickened. Right middle lung lobe atelectasis. Diffuse increased opacities throughout lung field.

ALT 227 in January, CBC WNL, T4 normal, USG 1.068 with 2+ proteinuria and an inactive sediment.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is mildly distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The left kidney is normal size (4.11 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

The right kidney is normal size (4.04 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

**Adrenal Glands**

The left adrenal gland is normal in size (0.46 cm length; 0.23 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is normal in size (0.80 cm length; 0.36 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

**Spleen**

The spleen is normal to slightly prominent in size (0.94 cm in width at the level of the hilus) with subtly swollen peripheral contours. Using a high frequency probe, the parenchyma appears slightly mottled. No focal lesions are observed. Splenic vasculature is normal with no evidence of thrombosis.

**Liver**

The liver is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence



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of congestion. No pathological hepatic lymphadenopathy observed. The portal vein: caudal vena cava ratio is approximately 1:1. The gall bladder lumen is moderately distended. The wall is thin and smooth. A scant amount of gravity-dependent echogenic debris is observed within the lumen. The cystic and common bile ducts are normal.

**Gastrointestinal**

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is minimally fluid distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. There is disruption in the normal 1:3 muscularis: mucosal ratio in most segments. Discreet masses are not identified. The ileocecal colic junction and colonic wall are normal. No obstructive disease is noted.

**Pancreas**

The left limb/body of the pancreas is visible/prominent with slightly irregular peripheral contours. The parenchyma is hyperechoic relative to surrounding omental fat and mottled in appearance with a few small hypoechoic nodules. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic effusion.

**Free Abdomen**

There is no evidence of free fluid. 1-2 mesenteric lymph nodes are visible but not overtly enlarged.

**Other**

A brief echocardiogram reveals no evidence of pericardial effusion.

**ULTRASONOGRAPHIC FINDINGS**

**Primary Findings:**

- Bowel pattern most consistent with inflammatory bowel disease. There is some potential for emerging lymphoma. However, neoplasia is considered unlikely at this time.
- The pancreatic changes are most consistent with age-related remodeling/fibrosis with benign nodular hyperplasia. Concurrent low-grade pancreatitis is also a possibility.
- Hepatic changes are non-specific and could be consistent with hepatic lipidosis, inflammatory/infectious disease, infiltrative neoplasia, or other hepatopathy.

**Secondary Findings:**

- The splenic parenchyma changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis or splenitis with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).



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- Bilateral age-related renal changes.

\*Given the sonographic changes, "triaditis" is a consideration for this patient.

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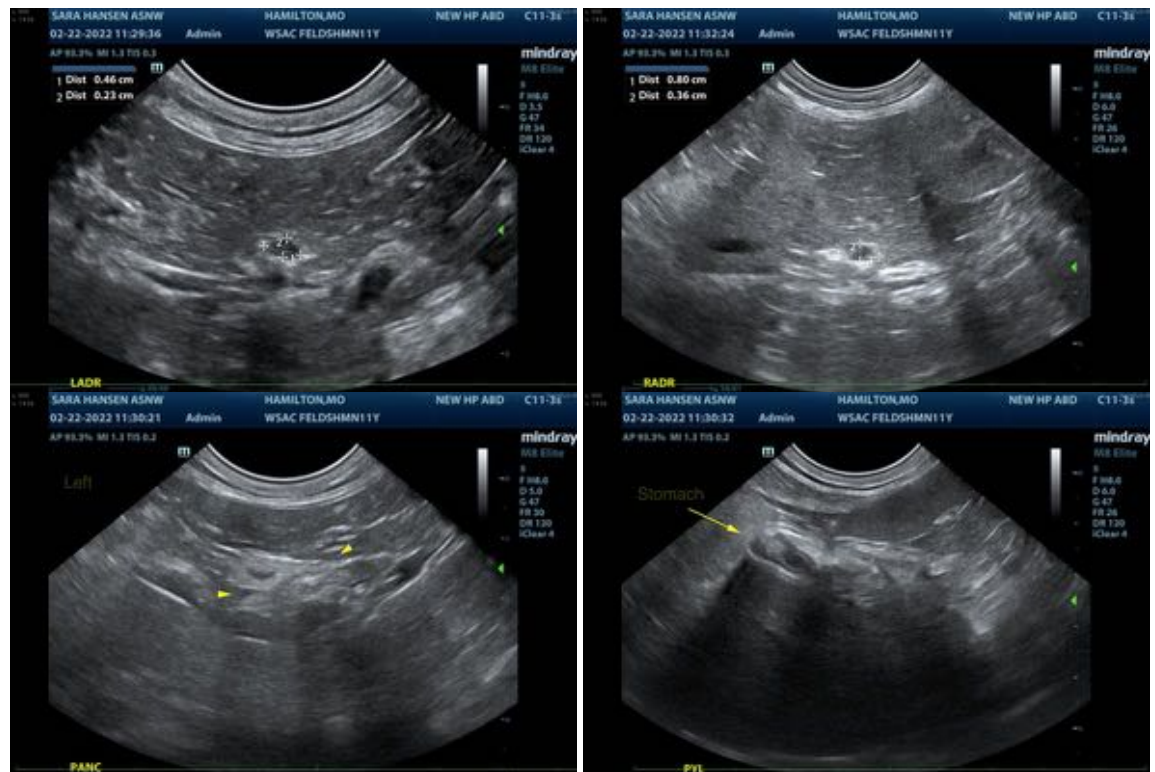
2/22/22

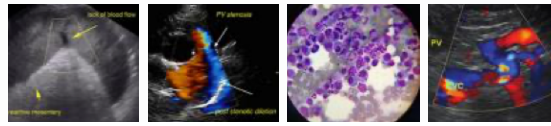
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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

- A GI panel including serum cobalamin, folate, TLI and PLI is recommended to better evaluate for pancreatitis and small intestinal disease. Also consider a fecal evaluation for ova and Giardia as well as a 6-week hypoallergenic diet trial.
- Consider a fine needle aspirate of the liver (if clotting status is appropriate) to further assess for hepatic lipidosis and infiltrative neoplasia. Other hepatopathies may be difficult to diagnose with cytologic evaluation.
- Depending on the results of the above diagnostics, endoscopic or surgical GI biopsies may be necessary to get a definitive diagnosis. If surgical biopsies are pursued, a liver biopsy should also be obtained.





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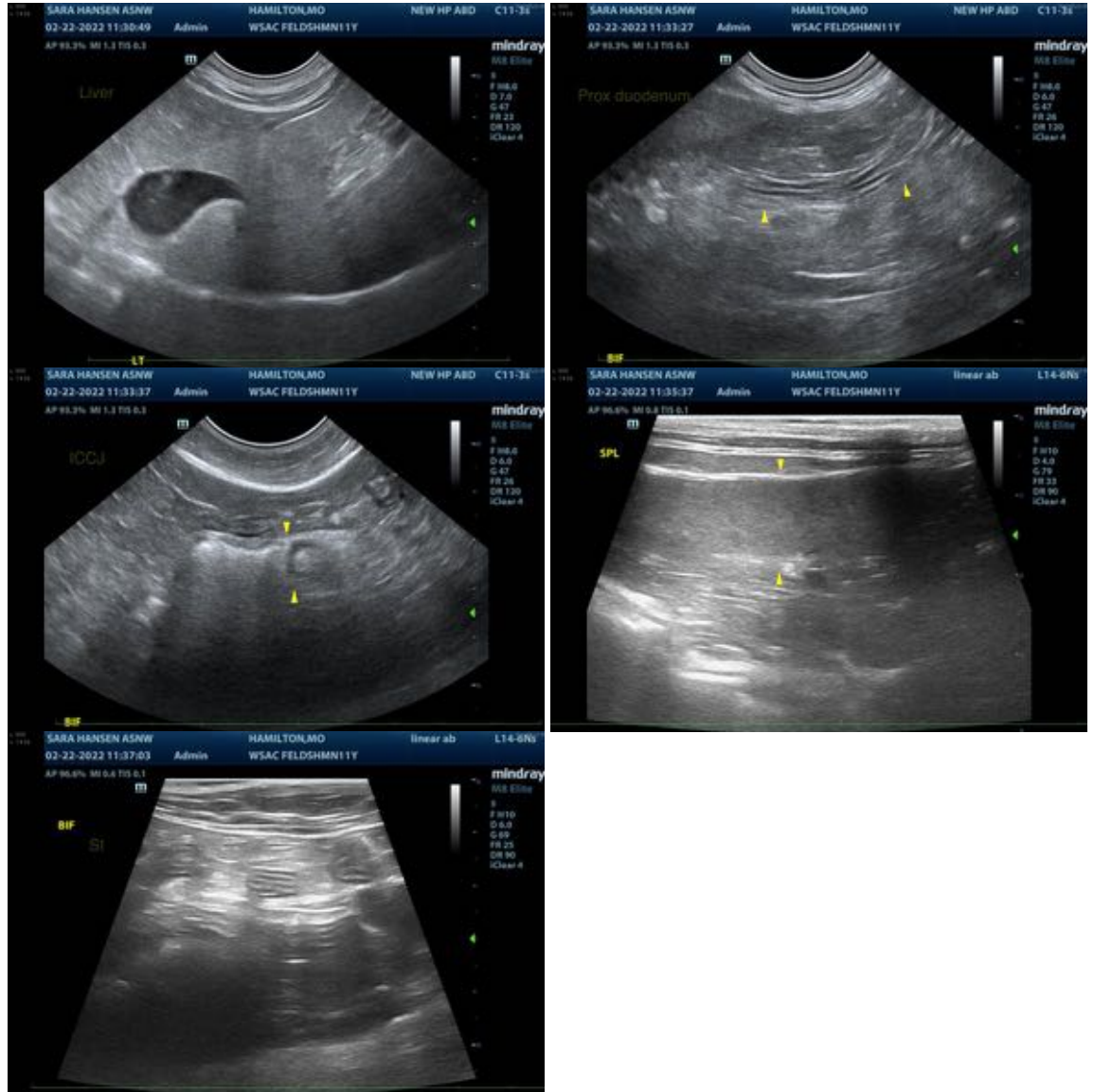
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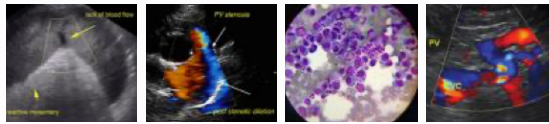


The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Andrea Nicastro, DVM, Diplomate ACVIM (Small Animal Internal Medicine)

[andrea.nicastro@sonopath.com](mailto:andrea.nicastro@sonopath.com)



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