


**PATIENT**

Wheatley Ross

**SPECIES**

Canine

**BREED**

 Australian Shepherd  
 mix

**SEX**

Male, neutered

**AGE**

9 Yrs.

**WEIGHT**

32 kg.

**INTERPRETED BY**

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

**IMAGING  
 PERFORMED BY**

Crystal Hill

**HOSPITAL NAME**

 Beatties East Hamilton  
 PH

**REFERRING VET**

Dr. MacDonald

**INVOICE**

12690

**DATE**

12/13/21

**PRESENTING CLINICAL SIGNS**

History: Distended firm/painful abdomen by palpation . Dandruff all over body with sores under hair when shaved. Dorsum hair loss in the flank region and back legs . P is PU/PD. Non-regenerative anemia, hematocrit 27%. Possible thrombocytopenia 93,000, hyperglobulinemia. Albumin slightly low. ALP is 218, ALP 192, USG 1.017. No proteinuria, inactive sediment. Slightly low thyroid.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**
*Urinary System*

The urinary bladder is moderately distended. The wall in the region of the apex is mildly thickened (up to 0.56 cm) with an irregular mucosal surface. The wall tapers to normal thickness as it extends toward the urinary bladder neck. A small amount of suspended echogenic debris is observed within the lumen. No cystic calculi are observed. The region of the trigone and the visible portion of the proximal urethra are normal.

The prostate is normal in size (1.29 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The left kidney is normal size (7.11 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (7.11 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

*Adrenal Glands*

The left adrenal gland is normal size (0.88 cm at cranial pole) (0.68 cm at caudal pole) (2.77 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

The region of the right adrenal gland is evaluated. No obvious pathology is observed.

*Spleen*

The spleen is normal in size (1.97 cm in width at the level of the hilus) with a normal capsular contour. The parenchyma is subtly mottled in appearance. No focal lesions are observed. Splenic vasculature is normal.

*Liver*

The liver is subjectively prominent in size with irregular peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely mottled, heterogeneous and nodular in appearance. There is no visibly normal appearing hepatic parenchyma. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is thin and smooth. A small amount of echogenic debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.


**PATIENT**
***Gastrointestinal***

Wheatley Ross

The gastric lumen is not distended. The gastric wall in the region of the fundus is normal in thickness with a normal layering pattern. In the region of the pyloric antrum, the wall is mildly thickened (up to 0.73 cm) with a prominent muscularis layer. The pyloric outflow tract appears patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

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**BREED**
***Pancreas***

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 mix

A portion of the pancreas is obscured by the hepatic pathology and ascites. In the visualized portion, no obvious pathology is seen.

**SEX**
***Free Abdomen***

Male, neutered

A moderate to large amount of slightly echogenic free fluid is present. The mesentery throughout the abdomen is hyperechoic and appears slightly nodular/clumped in some regions. The abdominal lymph nodes are normal/not visible.

**AGE**

9 Yrs.

**Other**

A brief echocardiogram reveals no evidence of pericardial effusion or obvious right atrial/auricular mass.

**WEIGHT**

32 kg.

**ULTRASONOGRAPHIC FINDINGS**
**INTERPRETED BY**

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**Primary Findings:**

- Non-specific diffuse hepatopathy. Differentials include infiltrative neoplasia, multifocal inflammatory disease, fibrosis, other.
- The ascites may be secondary to portal hypertension, low oncotic pressure or other.
- The mesenteric changes could be consistent with reactive change or infiltrative neoplasia (i.e., carcinomatosis)

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**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).
- Minor age-related renal changes.
- The bladder wall changes could be consistent with cystitis or may be somewhat artifactual due to lack of full repletion. Correlation with clinical findings is recommended.
- The thickened pyloric antrum may represent inflammation, hypertrophy, emerging neoplasia or may be a normal variant for this patient.

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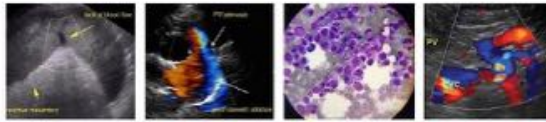
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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**
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- Three-view thoracic radiographs are recommended to assess for pulmonary metastases.



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- Consider submission of the abdominal fluid for fluid analysis and cytology. If results are inconclusive, a surgical biopsy of the liver +/- mesentery would be necessary to get a definitive diagnosis. If surgery is pursued, aerobic and anaerobic bile cultures as well as acquisition of additional hepatic tissue samples for potential copper quantitation are also recommended.

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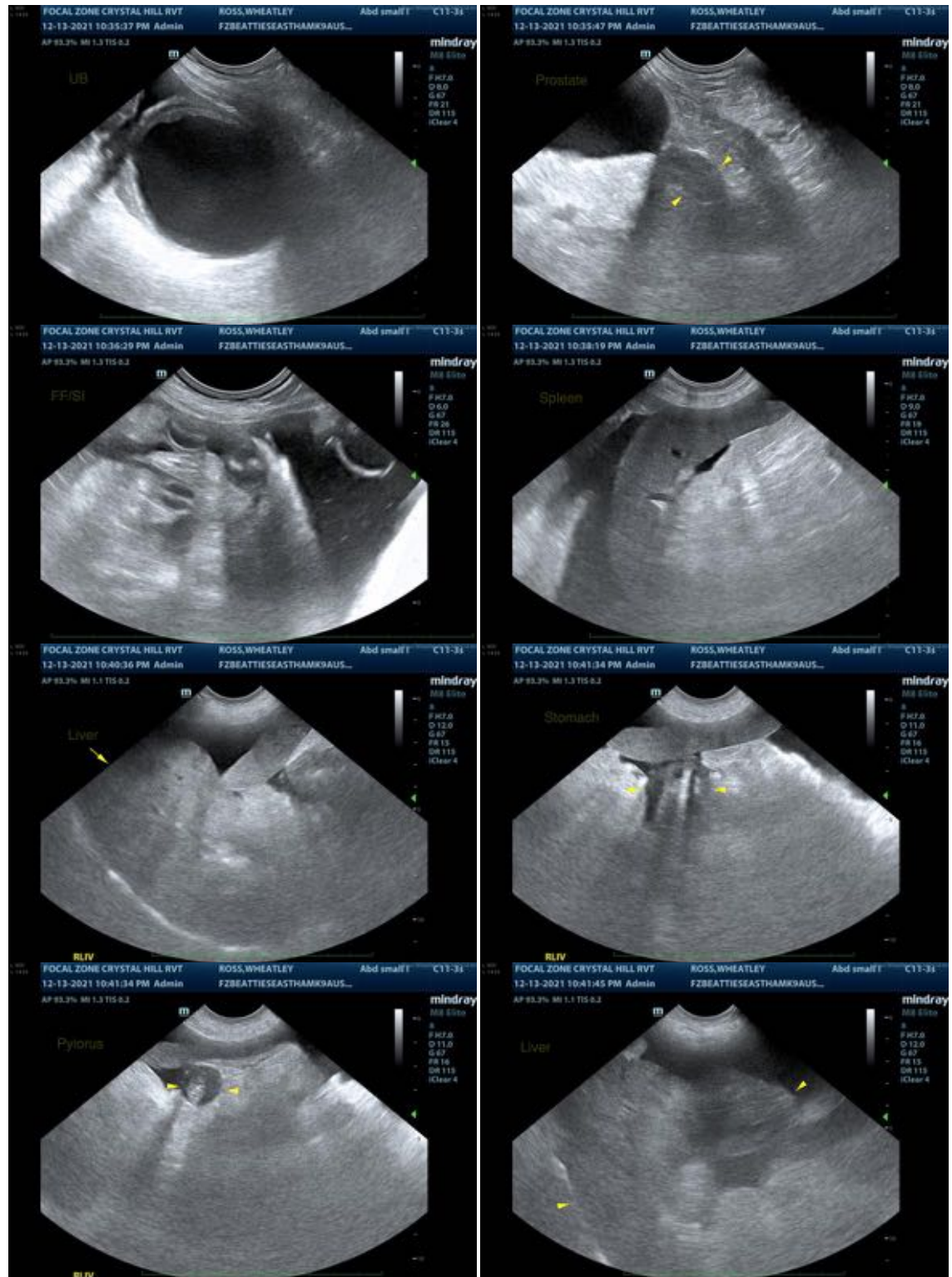
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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