



**PATIENT PRESENTING CLINICAL SIGNS**

Charlotte Sebastian 4 week history of PU/PD, lethargy, decreased appetite. ALP and ALT are elevated. Patient dispensed 4 week course of Denamarin and a 5 day course of Panacur to treat giardiasis. Appetite improved but other symptoms persist. ALT and ALP more elevated on 12/9/21. Screening for enlarged adrenal glands, liver disease.

**SPECIES**

Canine

Abnormal PE/Chem/CBC/UA Results: CBC-WNL Chem--ALT=231(10-125); ALP=546(23-212); Creatinine=2.4(0.5-1.8); BUN=31(7-27) Lepto PCR is pending

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED**

Hound X

**Urinary System**

Urinary bladder is moderately 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.

**SEX**

Spayed Female

Right kidney is normal in size (6.59 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.

**AGE**

8 Years

Left kidney is normal in size (6.91 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**

**WEIGHT**

63.7 Pounds

The right adrenal gland is mildly enlarged in size (2.6 cm long, 0.9 cm cranial pole, 0.8 cm caudal pole). Normal shape and contour are maintained. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is mildly enlarged in size (3.2 cm long, 0.9 cm cranial pole, 0.9 cm caudal pole). Normal shape and contour are maintained. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**Spleen**

Spleen is subjectively normal in size 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.

**HOSPITAL NAME**

Wauwatosa VC

**Liver**

Liver is subjectively enlarged. Margins are smooth but round. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal portal vein walls and increased echogenicity relative to the spleen. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

**REFERRING VET**

Dr. Ericka Haynes

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

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12/15/21



**PATIENT** *Gastrointestinal*

Charlotte Sebastian The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

**SPECIES**

Canine The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

**BREED**

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

**Pancreas**

**SEX**

Spayed Female Pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

**AGE**

8 Years There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

**ULTRASONOGRAPHIC FINDINGS**

**WEIGHT**

63.7 Pounds

- Bilateral adrenomegaly – consistent with adrenal hyperplasia secondary to pituitary depending hyperadrenocorticism vs normal variant.
- Hyperechoic hepatomegaly– most consistent with benign steroid (endocrine) hepatopathy or reactive or idiopathic hepatopathy. Infiltrative neoplasia such as round cell neoplasia is also possible, but considered less likely.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Hyperadrenocorticism is on the list of differentials for the PU/PD and mild adrenomegaly, and if diagnosed based on this ultrasound, is most likely pituitary dependent in nature. A low-dose Dexamethasone suppression test is recommended to definitively diagnose hyperadrenocorticism. However, hyperadrenocorticism does not typically result in lethargy, decreased appetite, and the reported azotemia in this patient, so it is suspected that that is likely a secondary problem, and the lethargy, decreased appetite and azotemia should be evaluated first.

**HOSPITAL NAME**

Wauwatosa VC

**REFERRING VET**

Dr. Ericka Haynes

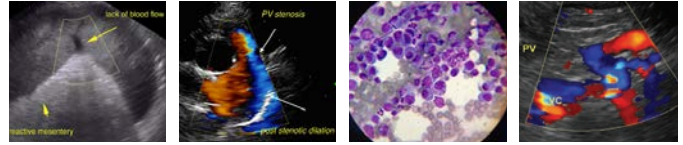
A urinalysis and urine culture are recommended due to the azotemia. Leptospirosis testing is recommended and is reportedly already pending. Other diagnostic recommendations include a fine needle aspirate of the liver if patient's coagulation status is appropriate. Empirical antibiotics could be considered in the meantime to address another potential infectious cause of the azotemia and the increased liver enzymes while waiting for results.

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**PATIENT**  
Charlotte Sebastian

**SPECIES**

Canine

**BREED**

Hound X

**SEX**

Spayed Female

**AGE**

8 Years

**WEIGHT**

63.7 Pounds

**INTERPRETED BY**

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**HOSPITAL NAME**

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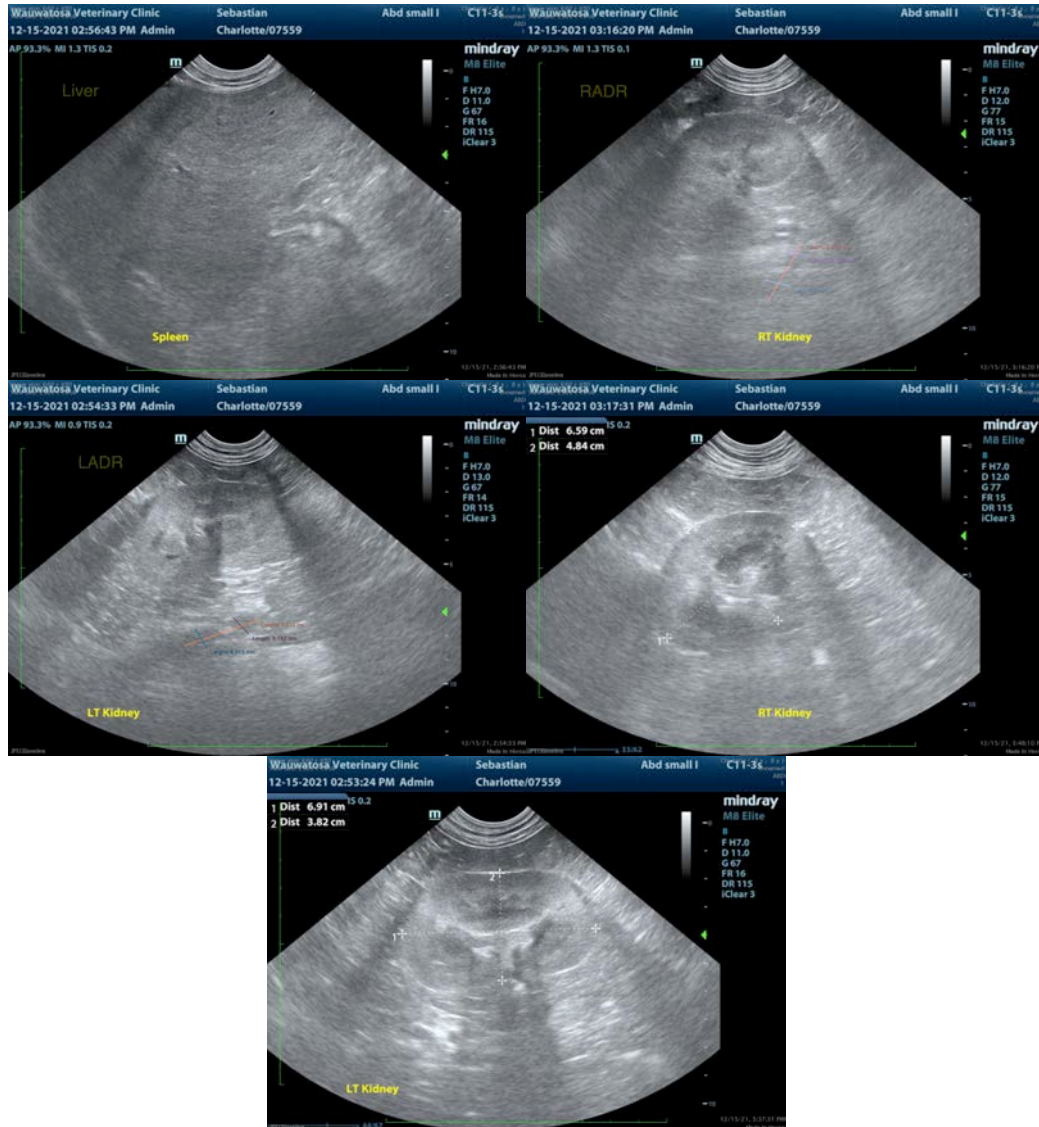
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

**Beth Johnson, DVM, DACVIM**  
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