



**PATIENT PRESENTING CLINICAL SIGNS**

Maxie Magee Had recent mass removal sx on 8/8/2022 - histo dx'd as a melanocytoma. Came back 3 days later for vomiting and diarrhea. BW came back with elevated BUN, ALT, ALP, and Lipase. Has hx of these elevated levels since April 2021. AUS before starting Denosyl.

**SPECIES**

Canine

Abnormal PE/Chem/CBC/UA Results: BUN 47, ALT 270, ALP 320, Lipase 1933.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED**

**Urinary System**

Norfolk Terrier

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

**SEX**

FS

Normal size and margination was present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild loss of corticomedullary symmetry and definition expected for the age of the patient. Mild bilateral pyelectasia was present. Left kidney focal cortical cyst observed. The left kidney measured 4.5 cm in length. The right kidney measured 4.5 cm in length.

**AGE**

15.5yr

The area of the aortic trifurcation was free of pathology.

**WEIGHT**

19.4lb

**Adrenal Glands**

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.50 cm width at the caudal pole and 0.43 cm width at the cranial pole.

**INTERPRETED BY**

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

The right adrenal gland exhibited mild enlargement with mild asymmetrical contour without evidence of parenchymal escape. Non-homogeneous non-mineralized parenchyma was present. No overt vascular invasion yet cannot be definitively excluded. The right adrenal gland measured 1.1 cm width and 2.0 cm length.

**IMAGING PERFORMED BY**

Pamela Harrigan, RDCS

**Spleen**

The spleen exhibited primarily finely textured parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Mild generalized parenchyma heterogeneity was present without evidence of nodular changes. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. The parenchymal heterogeneity is likely consistent with benign changes such as extramedullary hematopoiesis or age related remodeling with minor potential for inflammatory or neoplastic disease.

**HOSPITAL NAME**

Wood River Animal Hospital

**REFERRING VET**

Dr. Plunkett

**Liver**

The liver was borderline to mildly enlarged with symmetrical capsule contour and generalized non-uniform to mixed echogenic parenchyma exhibiting diffuse variably sized hypoechoic nodular changes. An example of a nodule measured 1.5 cm in diameter.

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The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content with minor mildly echogenic luminal debris. The cystic and common bile ducts were normal.

**DATE**

09/09/2022

**Gastrointestinal**

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material.



**PATIENT**

Maxie Magee

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material.

Normal visible colon wall layers were present with apparent formed feces in lumen.

**SPECIES**

Canine

**Pancreas**

The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.

**BREED**

Norfolk Terrier

**Free Abdomen**

No omental masses, lymphadenopathy or peritoneal effusion was present.

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**ULTRASONOGRAPHIC FINDINGS**

**AGE**

15.5yr

- Hepatopathy exhibiting non-uniform nodular parenchyma
- Mild chronic renal changes with bilateral pyelectasia and left kidney cortical cyst
- Right adrenal mass
- Sonographically unremarkable GI tract
- Mild pancreatic remodeling

**WEIGHT**

19.4lb

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The diffuse hepatic changes are non-specific with considerations including chronic vacuolar hepatopathy, chronic inflammatory/immune mediated disease, nodular hyperplasia, hematopoiesis, fibrosis or infiltrative metastatic neoplasia. Assuming normal clotting status and using a 25g needle a liver parenchyma FNA is recommended for screening cytology.

**INTERPRETED BY**

R. McKenzie Daniel, DVM,  
 DABVP (Canine and Feline)

The right adrenal gland is strongly suggestive of neoplastic criteria such as pheochromocytoma, adenocarcinoma while benign etiologies are possible. Screening BP to assess for evidence of hypertension which may allude to a right/left adrenal pheochromocytoma +/- LDDST if clinically indicated.

**IMAGING PERFORMED BY**

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The pyelectasia may be owing to chronic renal changes, potential pelvic scarring possibly owing to previous calculi passage, IV fluid therapy (if applicable). Urine C/S and protein: creatinine ratio on sterile urine sample is recommended.

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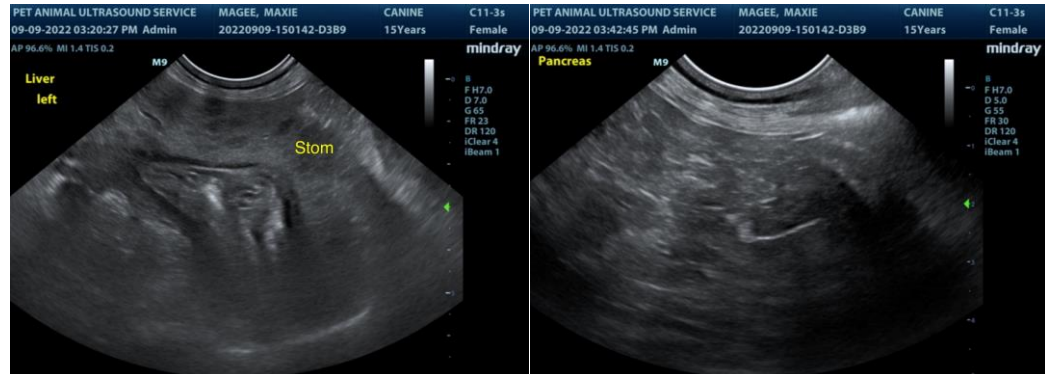
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**PATIENT**

Maxie Magee

**SPECIES**

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Norfolk Terrier

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**AGE**

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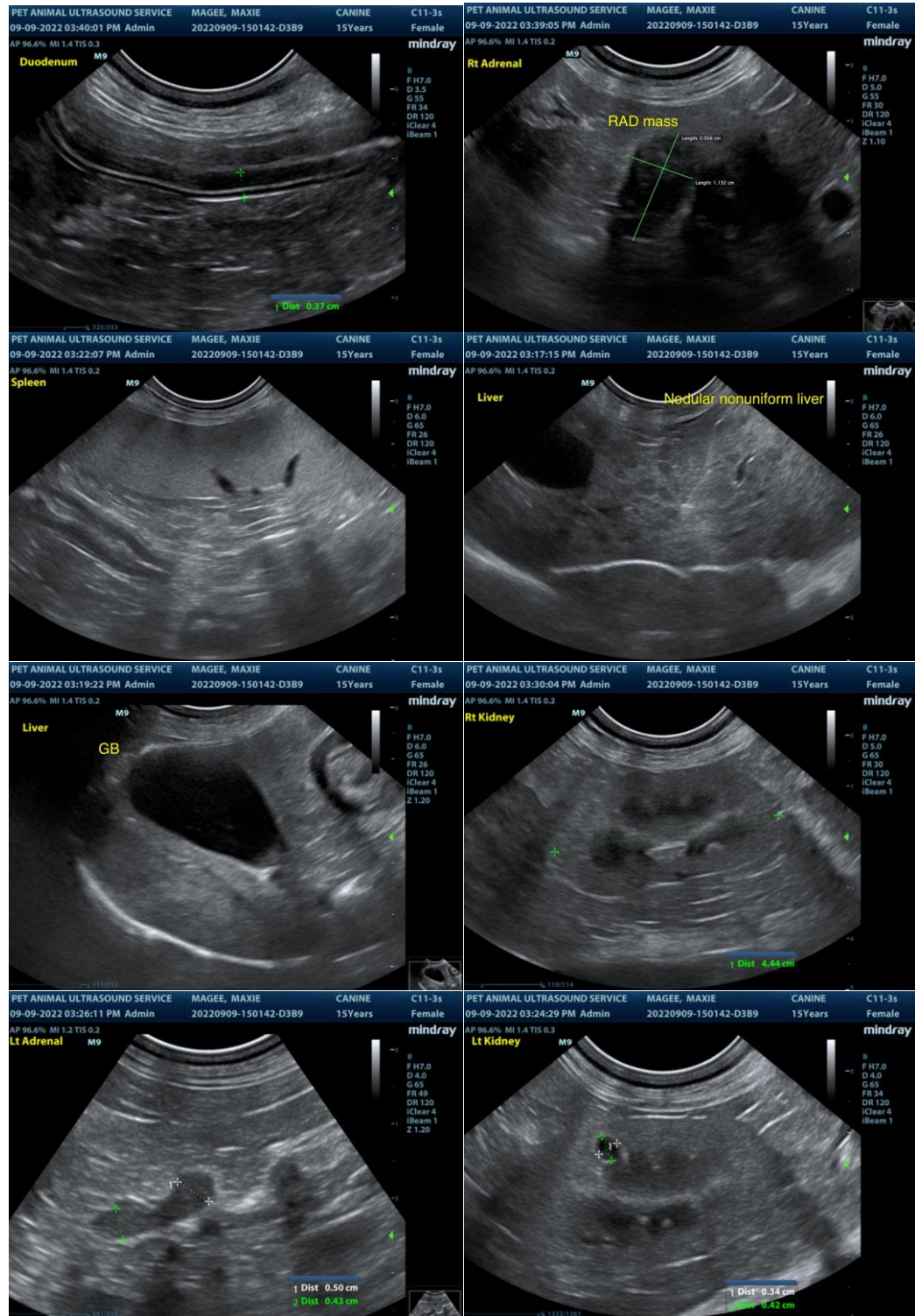
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I



**PATIENT**

can be of any further assistance please contact me.

Maxie Magee

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)  
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**AGE**

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