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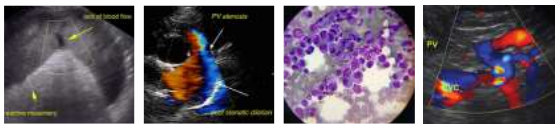


ANIMAL SOUNDS NW
MOBILE VETERINARY ULTRASOUND
IMAGING PERFORMED BY
AnimalSoundsNW.com 541-357-9423

**PATIENT**

Maggie Wilson

**SPECIES**

Canine

**BREED**

Terrier

**SEX**

Spayed Female

**AGE**

9 years

**WEIGHT**

17 lbs.

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Jenna Walsh

**HOSPITAL NAME**

Eugene AH

**REFERRING VET**

Dr. Morrison

**INVOICE**

12248

**DATE**

9/16/21

## PRESENTING CLINICAL SIGNS

Poor appetite, weight, loss Historical chronic kidney disease Liver had hypoechoic nodules on in house u/s Current Medications cerenia, mirtazapine, omeprazole, sucralfate, phosphorous binder Abnormal PE/Chem/CBC/UA Results: BUN, CR, Phos elevated

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

The bladder was normal in overall size and tone. The proximal urethra to a depth of 2.0 cm exhibited subtle dilation, suggestive of decreased proximal urethral tone. No evidence of urethral calculi was noted. Primarily anechoic urine was present in the lumen. Mild, particulate, nondependent sediment was present without evidence of calculus formation. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic criteria were noted.

The area of the aortic trifurcation was free of pathology.

Normal size and margination were present in the kidneys. Moderate loss of corticomedullary border demarcation with hyperechoic to likely mineralized corticomedullary border to potential nonspecific medullary rim sign was present. Small cortical cysts were present in the right kidney. The left kidney measured 4.7 cm in length. The right kidney measured 4.4 cm in length.

### *Adrenal Glands*

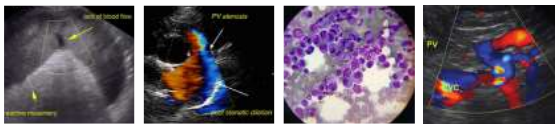
The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 1.8 cm length x 0.59 cm width at the caudal pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 1.8 cm length x 0.37 cm width at the caudal pole.

### *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.

### *Liver/ Gallbladder*

The liver presented mildly enlarged in size. The overall liver exhibited subjective normal echogenicity with moderate coarse echotexture, evidence of parenchymal remodeling, and intermittent to multifocal, non-expansive, subtly hypoechoic parenchymal nodules. The gallbladder was non-distended in size with primarily anechoic luminal content. The cystic and common bile ducts were normal.





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### *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.

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.

### *Pancreas*

The parenchyma of the left limb, body, and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease were evident.

### *Free Abdomen*

No overt lymphadenopathy or peritoneal effusion was present.

## ULTRASONOGRAPHIC FINDINGS

### *Primary Findings*

- Nondistended urinary bladder with mild particulate sediment
- Mild decreased proximal urethral tone - nonspecific
- Bilateral chronic renal changes with corticomedullary border mineral to nonspecific medullary rim sign
- Mild hepatomegaly with parenchymal remodeling and intermittent to multifocal subtly hypoechoic parenchymal nodules
- Sonographically unremarkable gastrointestinal tract

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The potential medullary rim sign noted in both kidneys may be seen in both normal and abnormal kidneys and at times has been associated with Interstitial renal disease, hypercalcemia, tubular necrosis, lymphoma, and Leptospirosis. However, this finding is nonspecific.

The subtly hypoechoic hepatic parenchymal nodules were not overtly consistent with neoplastic criterial which is considered a less likely differential diagnosis. Hepatic parenchymal remodeling with areas of hematopoiesis or subtle nodular to regenerative hyperplasia Is suspected.

Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered. Assessment of systemic blood pressure Is recommended. A GI panel to include PLI/TLI/Cobalamin/Folate, as well as three view chest radiographs are suggested, given the patient's weight loss. Continued gastrointestinal support is recommended.

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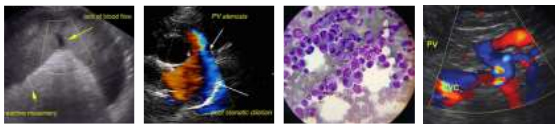

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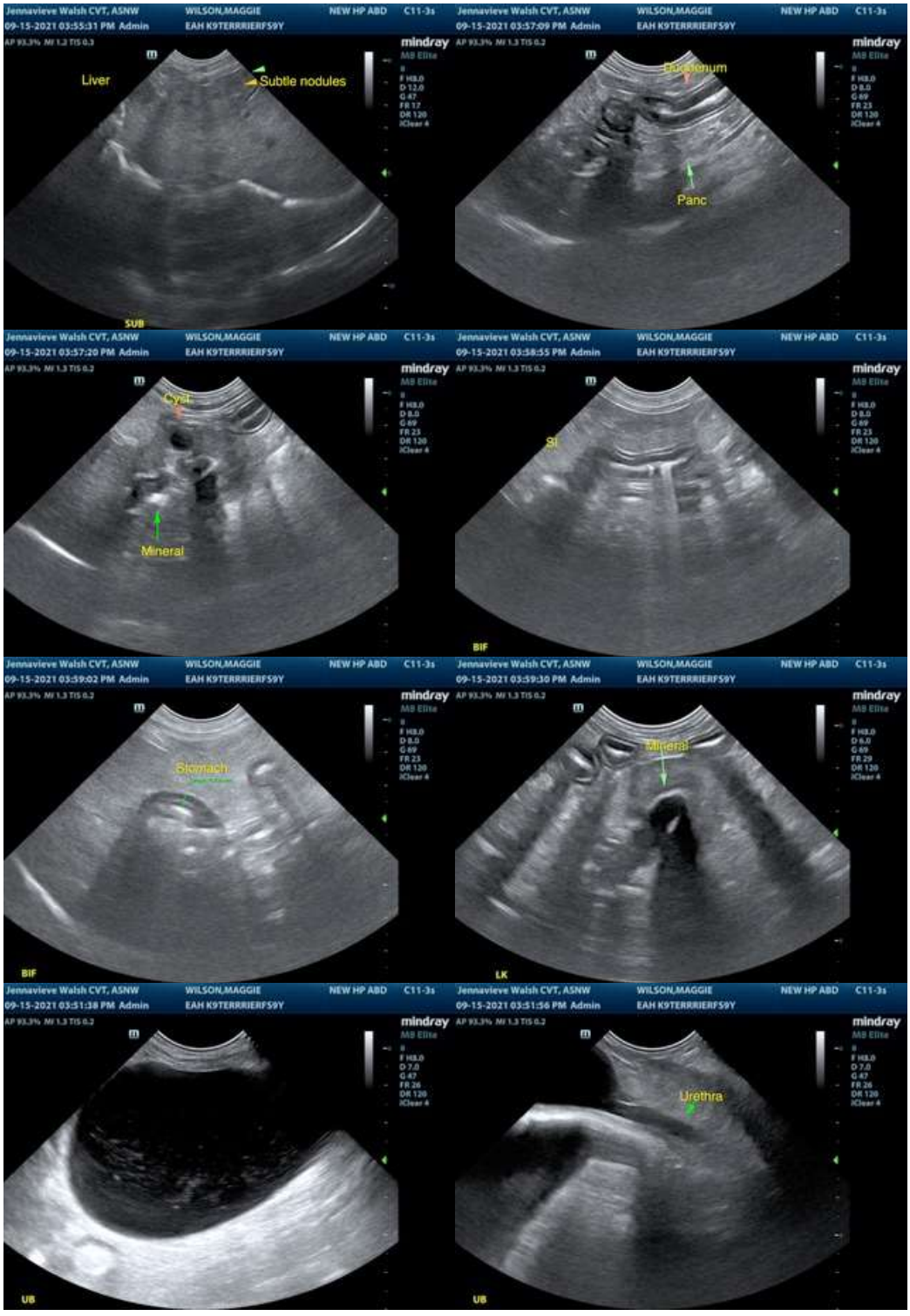

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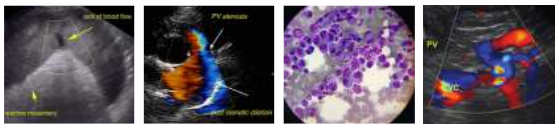

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**The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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.

**R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)**
**info@SonoPath.com**