



**PATIENT PRESENTING CLINICAL SIGNS**

Roxy Hayden  
Elevated renal values.  
Medication: Carprofen

**SPECIES**  
Abnormal PE/Chem/CBC/UA Results: CBC wnl, BUN 21, CREAT 2.0, SDMA 19, ALB 2.6, Na:K 28

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED** *Urinary System*

Newfoundland  
The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 4 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with mild dependent hyperechoic sand to micromineral. No evidence of microcalculi was noted. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

**SEX**

FS

**AGE**

2014

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio and normal corticomedullary definition were maintained. Both kidneys exhibited multifocal variably sized non-obstructive medullary calculi, an example of left kidney calculus measured 1.2 cm in diameter, an example of right kidney calculi measured 2.8 cm in diameter. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pelvic dilation. The left kidney measured 6.4 cm in length. The right kidney measured 7.2 cm in length.

**WEIGHT**

144

The area of the aortic trifurcation was free of pathology.

*Adrenal Glands*

**INTERPRETED BY**

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

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.53 cm width at the caudal pole and 0.51 cm width at the cranial pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.53 cm width at the caudal pole and 0.38 cm width at the cranial pole.

**IMAGING PERFORMED BY**

Rebekah Jakum, CVT  
ARDMS/RVT

*Spleen*

The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. 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. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

**HOSPITAL NAME**

Easton Animal Hospital

*Liver*

**REFERRING VET**

Dr. Titcher

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion.

**INVOICE**

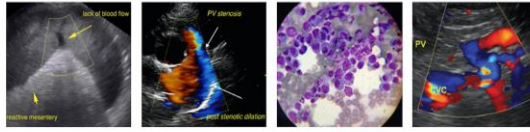
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The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal.

*Gastrointestinal*

**DATE**  
09/16/2022

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**

Roxy Hayden

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 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 was evident.

**BREED**

Newfoundland

**Free Abdomen**

No overt lymphadenopathy or peritoneal effusion was present.

**SEX**

FS

**ULTRASONOGRAPHIC FINDINGS**

- Mild dependent urinary bladder mineral/sand
- Bilateral moderate non-obstructive renolithiasis

**AGE**

2014

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

C/S on a sterile urine sample in conjunction with full UA if not done is recommended to rule out underlying infection. A renal or urinary diet may prove beneficial depending upon calculus/sediment type. Conservative CKD therapy such as Omega 3 fatty acids could be considered. Referral for lithotripsy may be considered in this patient.

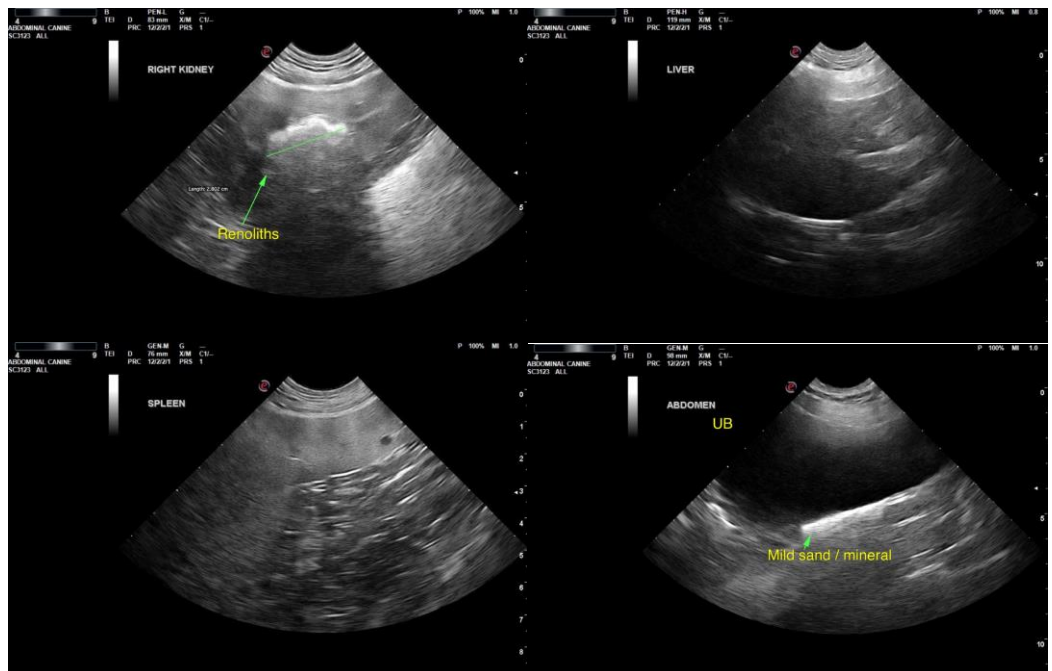
**WEIGHT**

144

No overt evidence of a portosystemic shunt was observed.

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(Canine and Feline)



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**HOSPITAL NAME**

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**REFERRING VET**

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**PATIENT**

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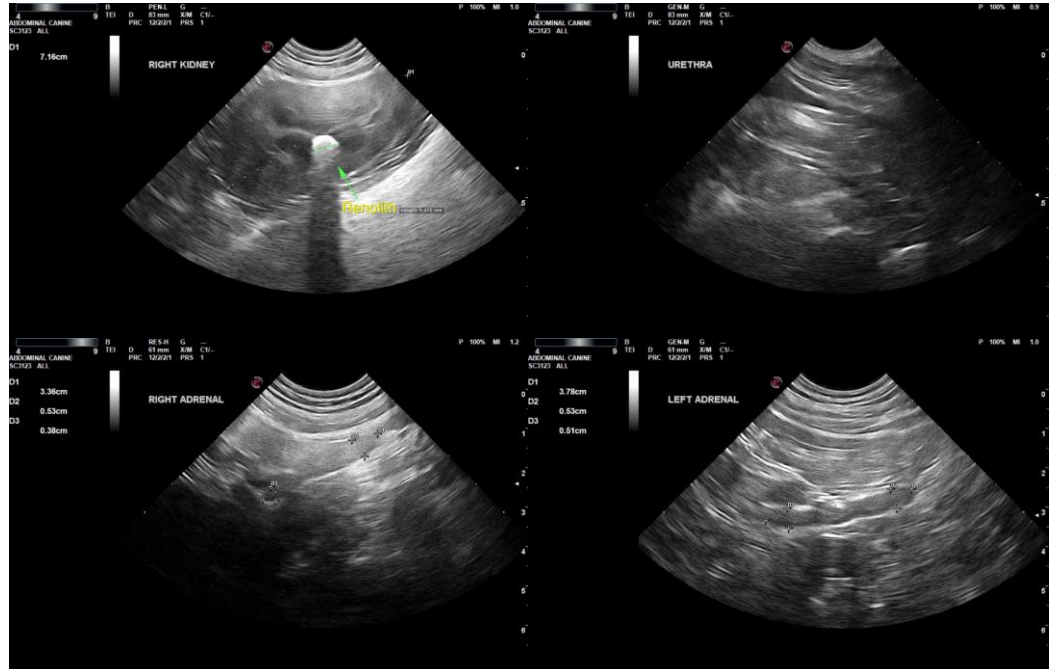
Dr. Titcher

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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.

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