

**PATIENT PRESENTING CLINICAL SIGNS**

Tyson Niarchos

Tyson has a long history of orthopedic disease, severe hip dysplasia/elbow dysplasia. BCS 7.5/9. Super friendly. LH recent visit for draining tract- trauma vs. FB (explored and didn't find)Current Medications Meloxicam

**SPECIES**

Canine

Abnormal PE/Chem/CBC/UA Results: Has history of azotemia; stable at this point. Was worse when on Rimadyl per O Long history of crystaluria Most profound change was the hematuria (50-70 hpf) from a free catch sample; no urinary symptoms per O. Also, elevated WBCs in urine too

**BREED**

Bulldog

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**SEX**

MN

**Urinary System**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra exhibited normal size and tone to a depth of 2.0 cm. Subtle ventroapical to dorsal-apical mural hypertrophy with mild asymmetrical luminal surface was present. The apical urinary bladder wall width measured 0.57 cm. Mild dependent mineralized sand to accumulated small calculi were present. An example of a calculus measured 0.52 cm in diameter.

**AGE**

8 Years

The residual prostate was symmetrically normal in size with uniform parenchyma and slight coarse echotexture measuring 1.1 cm in diameter.

**WEIGHT**

102.6

No evidence of pathology in the area of the aortic trifurcation.

**INTERPRETED BY**

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

Normal size and margination were 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. Pinpoint areas of medullary mineralization were present. No evidence of pyelectasia or overt pyelonephritis was noted in either kidney. The left kidney measured 7.8 cm in length. The right kidney measured 7.5 cm in length.

**IMAGING PERFORMED BY**

Jenna Walsh

**Adrenal Glands**

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.51 cm width at the caudal pole and 0.45 cm width at the cranial pole. No overt pathology was noted in the area of the right adrenal gland.

**HOSPITAL NAME**

Willakenzie Animal  
Clinic

**Spleen**

**REFERRING VET**

Dr DeWall

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.

**INVOICE**

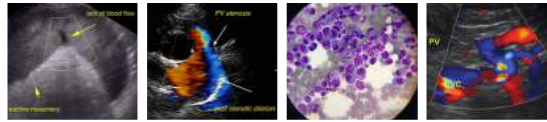
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**Liver**

**DATE**

9-17-21

The liver exhibited potential mild subnormal size with normal 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. The gallbladder was non-



**PATIENT**

Tyson Niarchos

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

**SPECIES**

Canine

**Gastrointestinal**

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained echogenic to focally shadowing ingesta most consistent with post prandial presentation without signs of ileus, obstruction or foreign material.

**BREED**

Bulldog

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.

**SEX**

MN

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

**Pancreas**

**AGE**

8 Years

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.

**WEIGHT**

102.6

**Free Abdomen**

No overt lymphadenopathy or peritoneal effusion was present.

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**ULTRASONOGRAPHIC FINDINGS**

**Primary**

- Urinary bladder mineral to small calculi with likely associated mild cystitis
- Bilateral mild chronic renal changes with pinpoint medullary mineral
- Potential mild subnormal liver size

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**Secondary**

- Mild echogenic to shadowing gastric ingesta

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Urine C/S on a sterile urine sample is recommended. Dissolution diet may be attempted with sonographic monitoring of the mineralized sediment and calculi. Cystotomy with retrograde urethral flush may eventually be indicated.

**REFERRING VET**

Dr DeWall

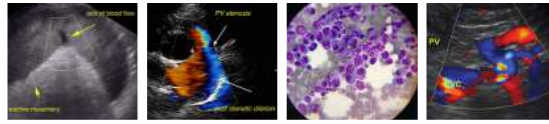
The potential for mild subnormal liver size is nonspecific and may indicate a normal patient variant. Fasting and postprandial bile acids may be considered if clinically indicated, given evidence of previous or current hepatic enzyme elevation and in light of the urinary bladder mineralized sand to calculi. Postprandial gastric presentation is suspected. Correlation with the most recent meal ingestion is recommended.

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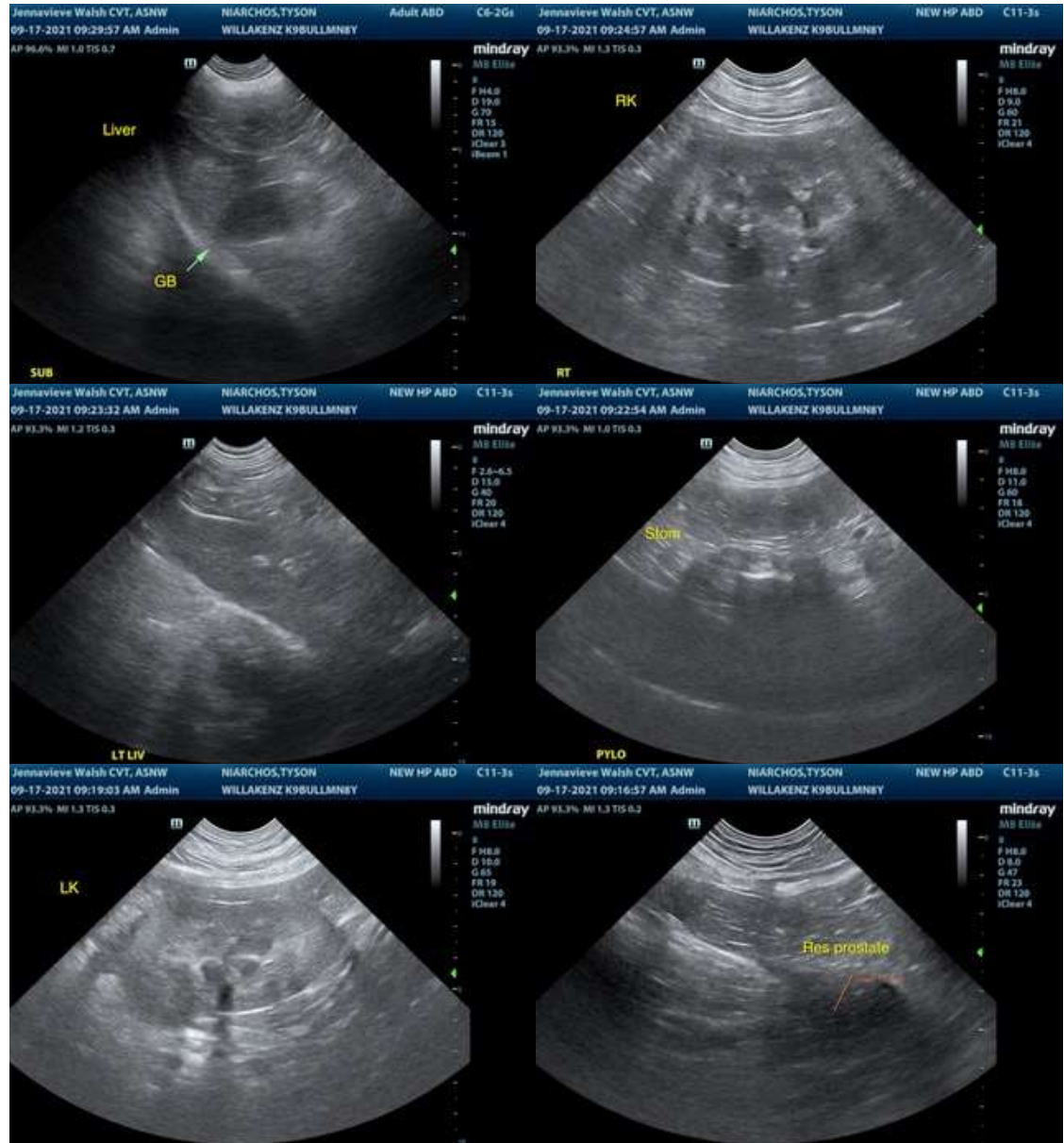
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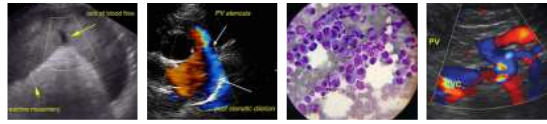
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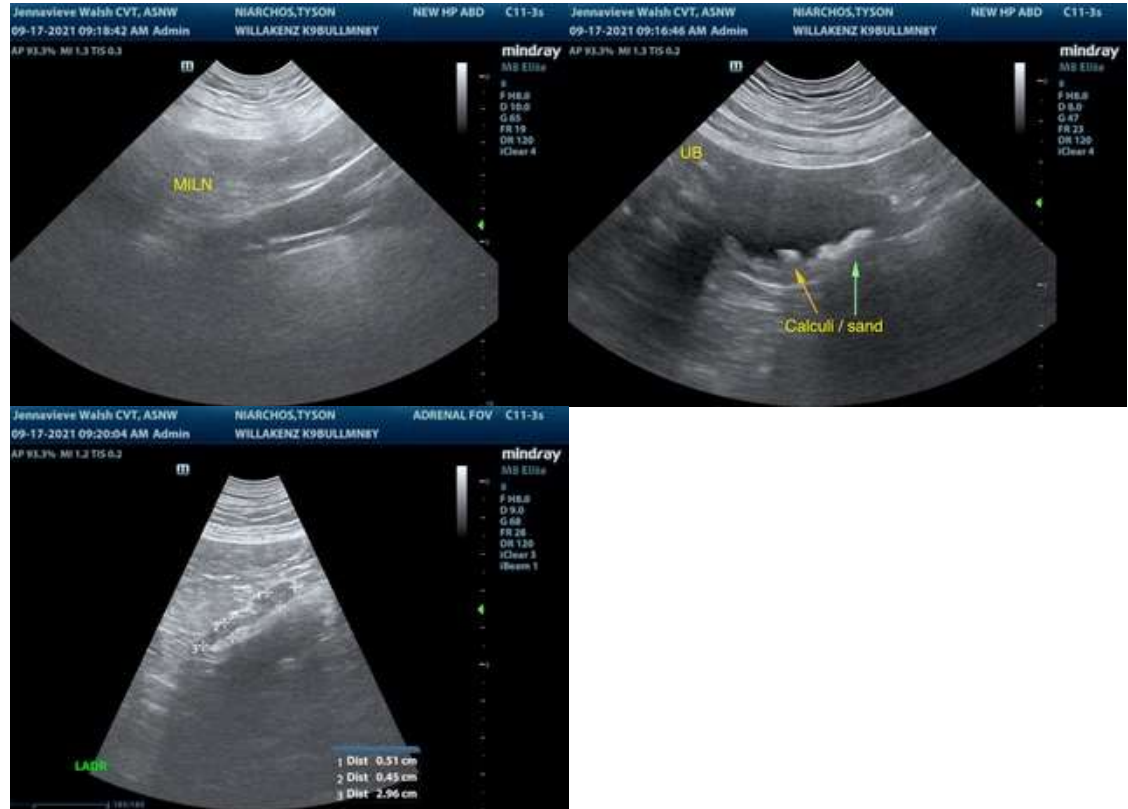
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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