

**PATIENT**

Poogaman Starzewski

SPECIES

Canine

BREED

Pug

SEX

Neutered Male

AGE

6 Years 5 Months

WEIGHT

10.26 kg

INTERPRETED BYR. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)**IMAGING PERFORMED BY**

Sarah Pender, CVT

HOSPITAL NAME

Tom McNeill

REFERRING VETDr. McDaniel- Madison
VS**INVOICE**

15024

DATE

5/3/22

PRESENTING CLINICAL SIGNS

History: Poogaman presented for further evaluation and care for acute onset of severe azotemia. Poogaman has been having nausea and vomiting since Thursday afternoon. He is known to eat rabbit feces and plants. Since Thursday, anything that he eats, he will vomit up either immediately or up to 2 hours later. Since yesterday, he has not eaten or drunk anything. A few weeks ago, the owner changed the food for both dogs to Hills Sensitive Stomach because of the older dogs issues. Poogaman has been lip licking for a few months but has gotten worse the past week. He has been more lethargic, shaking intermittently, and has really bad breath. Last defecation and urination were Saturday. Owner tried Famotidine to help with the nausea, but it didn't help. Poogaman has produced little to no urine despite (14.5mL over a 12-hour time frame) and appears edematous (subcutaneous edema present ventrally), and had perirenal fluid accumulation on FAST scan

Abnormal PE/Chem/CBC/UA Results: Creat - 17.6 (0.5 - 1.8) BUN - 250 (7-27) Urinalysis: Collected Via cysto Color - pale yellow Clarity - slightly cloudy SG - 1.024 pH - 6.0 Pro - 500 Glu - Neg Ket - Neg UBG - Normal Bil - Neg BLD - 50 WBC - 5/HPF RBC - 4/HPF Bacteria - suspect Sq Epi - <1/HPF Non-sq Epi - 3-5/HPF Casts - Suspect non-hyaline Crystals - <1/HPF - unclassified 1-5/HPF - struvite

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder initially presented contracted to subnormal in size owing to lack of luminal urine or urine distention. Sonographic reassessment following saline infusion via catheterization revealed overtly normal urinary bladder walls with moderate to significant nondependent to swirling potentially adhered hyperechoic sediment. The catheter was visualized in the area of the urinary bladder neck and trigone, extending mildly into the urinary bladder center.

The residual prostate was symmetrically normal in size with uniform parenchyma and slight coarse echotexture measuring 1.3 cm in diameter. No evidence of residual prostatic pathology. The urethra was normal in structure and tone to a depth of 2.0 cm.

The area of the aortic trifurcation was free of pathology.

Normal size was present in the kidneys. Both kidneys exhibited primarily symmetrical margination. 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 pyelectasia was present in both kidneys. No overt evidence of retroperitoneal inflammation/effusion. Pinpoint areas of subjective medullary mineral noted. The left kidney measured 4.5 cm in length. The right kidney measured 4.5 cm in length. Doppler assessment of both kidneys exhibited adequate to subjective mildly enhanced corticomedullary blood flow.

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 0.48 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 0.37 cm width at the caudal pole and 0.40 cm width at the cranial pole.

Spleen

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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.

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Liver

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.

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The gallbladder was non-distended in size with thin walls and primarily anechoic content with mild nondependent particulate luminal debris. The cystic and common bile ducts were normal. Although nonspecific, the minor luminal debris is likely owing to fasting in this patient given the clinical history.

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Gastrointestinal**AGE**

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The stomach presented intact wall layering with a normal wall layer ratio. The visualized gastric walls were sonographically normal. The lumen of the stomach was primarily empty with luminal gas. No overt evidence of retained ingesta, fluid or foreign material. The ventral gastric body wall measured 0.40 cm.

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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. The duodenum wall measured 0.49 cm. The jejunum wall measured 0.34 cm.

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

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(Canine and Feline)**Pancreas**

The pancreas base exhibited normal size and subtle hypoechoic parenchyma compared to adjacent omentum.

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Free Abdomen

No overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS**HOSPITAL NAME**

Tom McNeill

- Moderate to significant, nondependent to swirling, potentially adhered, urinary bladder sediment
- Bilateral nephropathy with minor pyelectasia
- Overtly normal gastrointestinal tract
- Mildly hypoechoic pancreas base- nonspecific

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Sonographically, the bilateral kidneys exhibited mild loss of corticomedullary border demarcation and pinpoint medullary mineral, which are suggestive of mild chronic changes. The kidneys did not appear to be sonographically end-stage. An acute on chronic renal insult, given the degree of azotemia, is highly suspected given this presentation. Consider exposure to leptospirosis/infectious renal toxicity (i.e., grape, raisin or other). The mild pyelectasia in both kidneys is suspected to be secondary to IV

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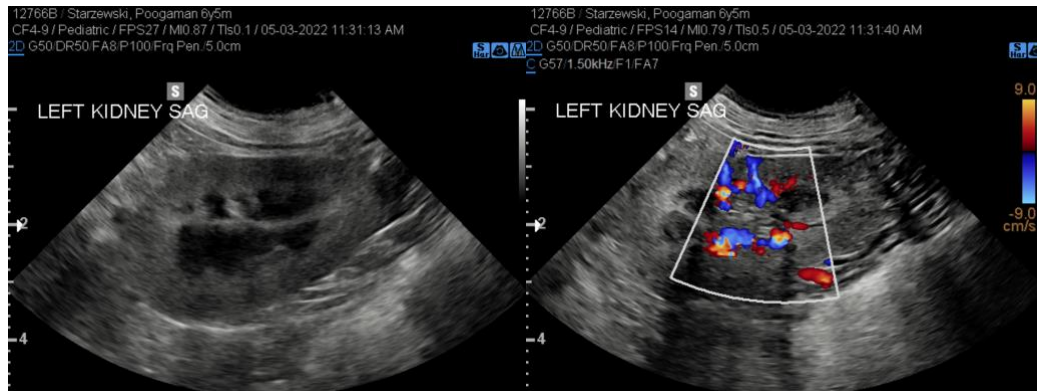
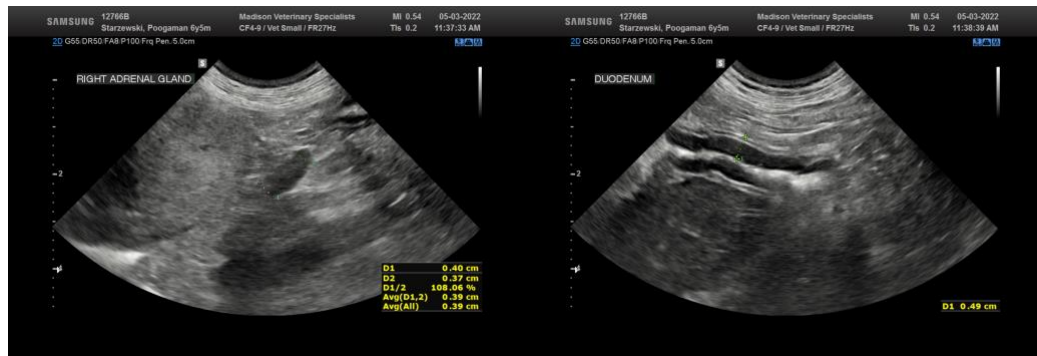
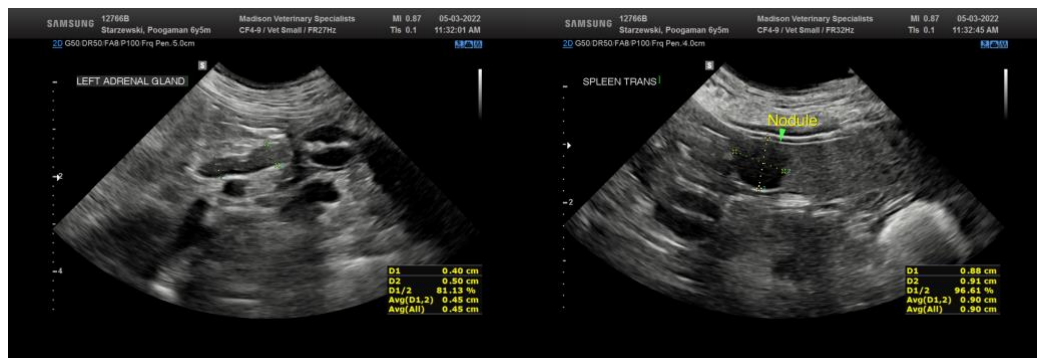
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fluids. Given the lack of significant urine production, potential for emerging anuric renal failure possible. Correlation with full urinary work up, including culture and sensitivity and potential pathology review of cytospin, urinary bladder sediment. Guarded prognosis indicated, depending upon renal response to diuresis protocol with continued monitoring of urine output and body weight.

The mildly hypoechoic pancreas base may indicate patient variant, mild edematous change or low-grade inflammation. If inflammation is present, the degree of inflammation did not appear to be sonographically significant.



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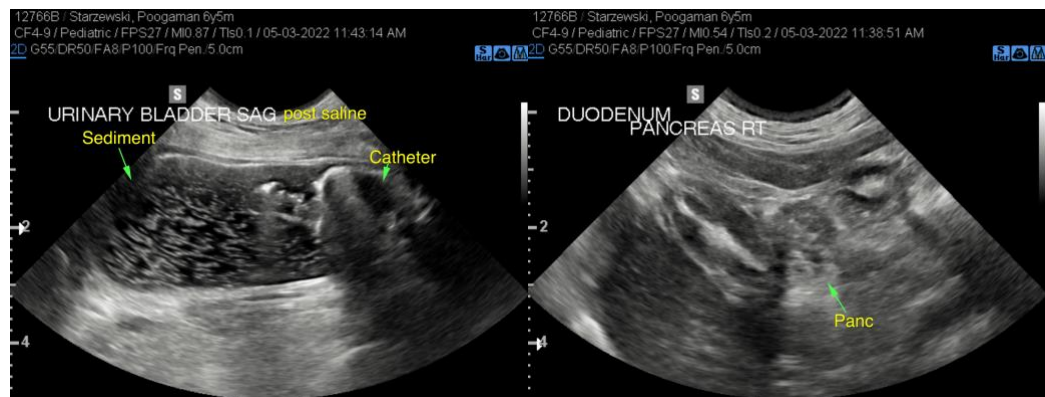
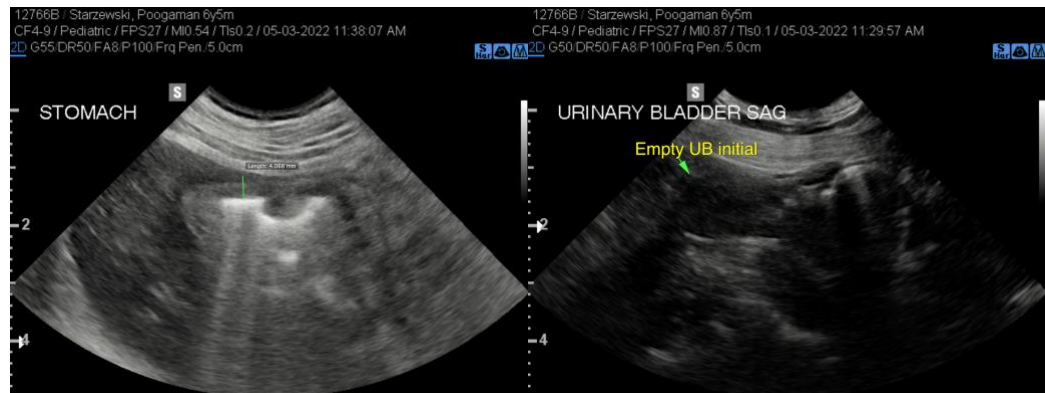
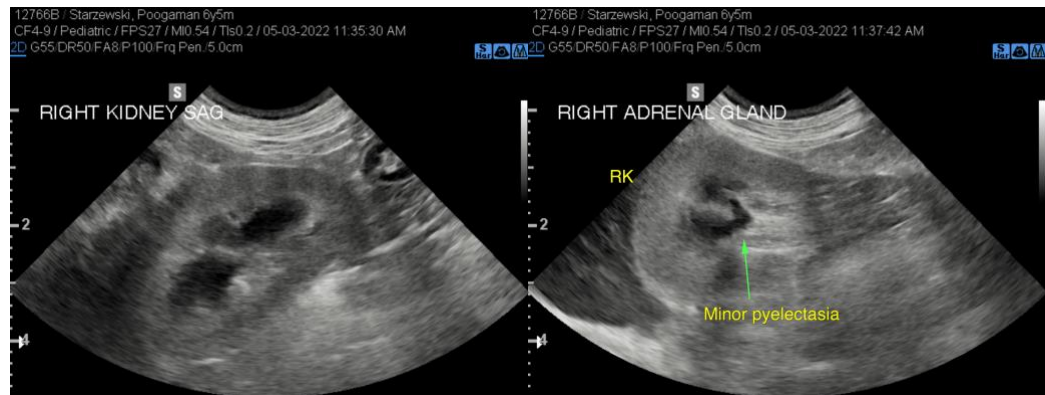
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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