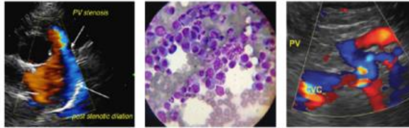
IMAGING PERFORMED BY
SVS Mobile Imaging KC 816 - 401 - 5010
svsimagingkc@gmail.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT

Luna Smith

SPECIES

Canine

BREED

Mix

SEX

FS

AGE

11 years

WEIGHT

38.9 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Runnells, RVT

HOSPITAL NAME

SVS Imaging KC

REFERRING VET

Dr. Jennifer Simon

INVOICE

DATE

6/9/22

PRESENTING CLINICAL SIGNS

Presented with some bloody urine and incontinence problems. Did not seem to improve after being on carprofen and amoxicillin.
Abnormal PE/Chem/CBC/UA Results: No abnormal exam findings, no additional lab work performed.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder was subnormal in size owing to lack of urine distention which prohibited full evaluation of the urinary bladder walls. Subjective mild thickening primarily of the mid to cranial aspect of the ventral apical and dorsal urinary bladder wall with mild asymmetrical luminal surface contour. The dorsoapical urinary bladder wall width measured 0.52 cm. Mild anechoic urine was present with no sediment or calculi. The urethra exhibited overtly normal structure and tone to a depth of 3.0 cm.

The area of the aortic trifurcation was free of pathology.

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 subtle medullary mineral were noted in both kidneys. Medial thinly-walled cortical cyst containing anechoic fluid was present in the right kidney. The right kidney cortical cyst measured 0.8 cm in diameter. No evidence of pyelectasia was present. The left kidney measured 6.3 cm in length. The right kidney measured 6.9 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 0.73 cm width at the caudal pole and 0.48 cm width at the cranial pole.

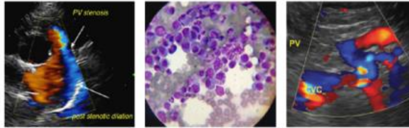
A non-expansive, well-demarcated, uniform mildly hyperechoic nodule was present in the mid to cranial right adrenal gland without distortion of the adrenal capsule. The nodule did not exhibit signs of mineralization or vascular invasion. The nodule measured 1.0 cm x 0.83 cm. The overall right adrenal gland measured 0.71 cm width at the caudal pole and 0.92 cm width at the cranial pole.

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.

Liver/ Gallbladder

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



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normal in appearance without signs of congestion. The gallbladder was non-distended in size with thin walls containing mild gallbladder debris. The cystic and common bile ducts were normal.

Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained mild to moderate, nonshadowing ingesta most consistent with post prandial presentation without 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

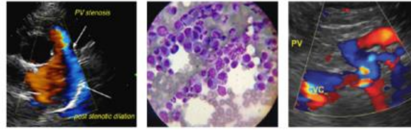
- Mildly thickened urinary bladder
- Bilateral chronic renal changes with right kidney medial cortical cyst
- Right adrenal nodule - suspect adenoma
- Minor gallbladder debris - incidental (non-mucocele)

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

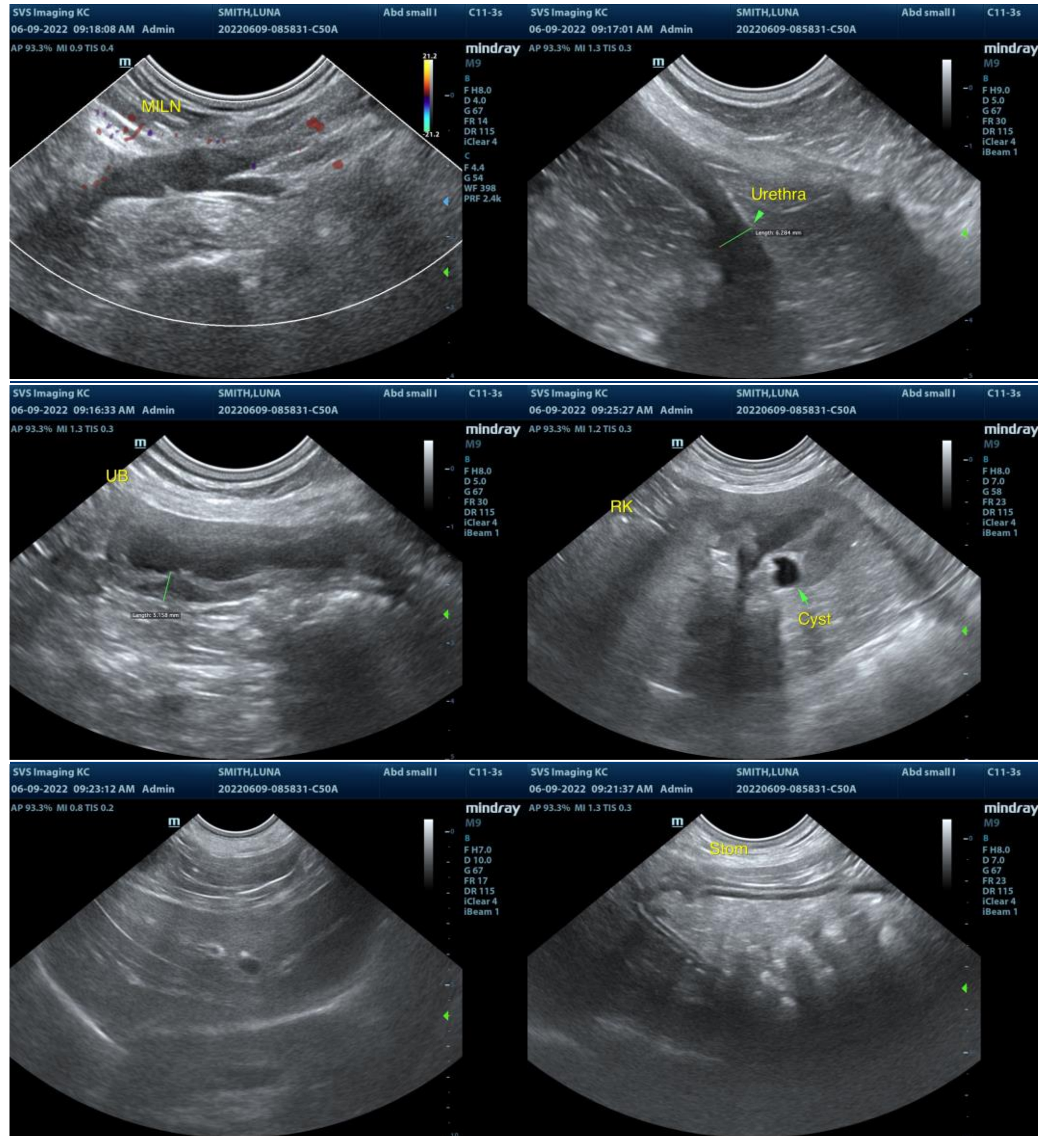
Although nonspecific given the lack of urinary bladder distention, the bladder presentation is suggestive of chronic to possibly active cystitis. Typically, urinary bladder neoplasia such as transitional cell carcinoma Initiates in the trigone region and, at this time, Is not sonographically evident. Potential for concurrent mild urethritis cannot be definitively excluded. Screening BRAF Assay could be considered for further assessment. Urine culture and sensitivity on a sterile urine sample, if not recently done, is recommended. No overt evidence of primary renal pathology as a primary or contributing factor to the hematuria.

The possibility of emerging right adrenal neoplasia, i.e., pheochromocytoma or adenocarcinoma, as an alternative etiology for the nodule is considered less likely, yet cannot be definitively excluded. Screening blood pressure is suggested to assess for evidence of hypertension.

Sonographic monitoring of both the urinary bladder for evidence of progressive wall thickening as well as the right adrenal gland nodule for evidence of progressive changes or enlargement with initial



recheck in 4-6 weeks is recommended. A Proin trial could be considered assuming no evidence of hypertension.



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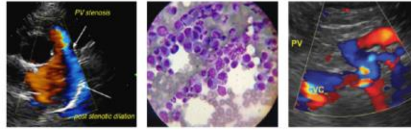

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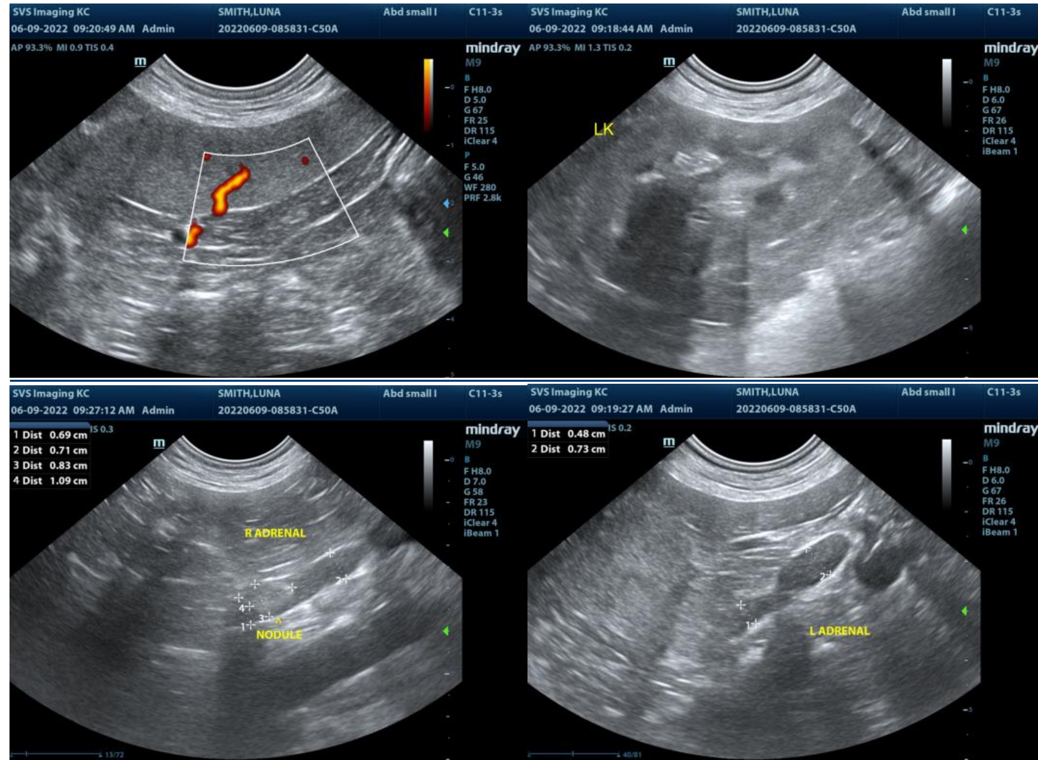

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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