

**DATE PRESENTING CLINICAL SIGNS**

7/20/22

Recurrent urinary issues since December 2021. 6/23/22: Rocky, a 7 year old male German Shepherd, presents for elimination concerns. Pet is acting constipated. Possible reoccurring UTI, trying to urinate frequently, sometimes only small amounts at a time, large amount here at hospital

PATIENT

Rocky Ellis

BAR, ANXIOUS BUT COOPERATIVE, TPR wnl, BCS: 5/9, Wt: 94.00 lbs / 42.64 kgs, CRT/MM: <2s/moist/pink, H/L: no murmur, normal rhythm and lung auscultation, Coat/Skin: HYPERPIGMENTATION OF ABDOMEN, Eyes: No discharge, pupils equal and reactive, Ears: AS PINNAE NOTCHED FROM PREVIOUS INJURY, N/T: No discharge

SPECIES

Canine

Dental Calc: MILD TARTAR, ABD: TENSE DUE TO NERVOUSNESS

BREED

German Shepherd

GI/UG: PENDULOUS PREPUCE, PROMINENT NIPPLES-SOME HAVE FIRM SWELLINGS, ONLY ONE TESTE IN SCROTUM, LN: no palpable enlargements, M/S: Normal ambulation, no pain on palpation

Neuro: NSF, Rectal: PROSTATE ENLARGEMENT- FEELS SMOOTH AND SYMMETRICAL

Current Medications: None currently. Treated with Clavamox and Rimadyl for UTI.

Lab Results: 12/22/21 CBC/Chem/DIFF: all values wnl except MCV L, PLT L 48, blood smear shows PLT clumps; UA: consistent with UTI

5/19/22 UA: consistent with UTI

SEX

Intact Male

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Declined.

Stat Report: Not requested.

AGE

12/21/14

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**WEIGHT**

94 Pounds

****Evaluation of the abdomen was challenging due to lack of patient sedation (sedation declined) and interference of the large cystic structures.**

Urinary System

The urinary bladder is very large, distended, and cranially displaced. There is a very large volume of echogenic urine within the urinary bladder. The area of the trigone, ureteral papillae and proximal urethra appear normal.

The prostate appears very abnormal. There is a section of irregular heterogeneous tissue in the region of the prostate, measuring approximately 5.7 cm x 3.6 cm. Arising from this tissue, there appears to be two extremely large, thick walled, cystic structures, measuring >6.0 cm x 6.0 cm, most consistent with para prostatic cysts/abscesses. There is echogenic material within these lesions, and within the prostatic urethra, which is dilated and thickened. A partial obstruction is suspected.

INTERPRETED BY

Kathleen Sennello DVM,
MS, Diplomate ACVIM
(Small Animal Internal
Medicine)

The left kidney is large at 9.58 cm with decreased corticomedullary distinction and severe pyelectasia of 1.55 cm. . There is no evidence of perinephric inflammation or effusion. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (9.02 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.80 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Banfield Westminster

REFERRING VET

Dr. Stephens

INVOICE

39686

The right adrenal gland is normal in size measuring 0.69 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. The duodenum measured as normal (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

There is a small amount of free fluid. A mild lymphadenopathy is evident in the caudal abdomen. The omentum is hyperechoic in the region of the caudal abdomen.

Other

The left testicle is visualized within the scrotum with normal architecture, appearing somewhat small at 2.69 cm. The right testicle is not visualized within the scrotum. There is a heterogeneous intrapelvic mass effect measuring 5.3 cm x 3.86 cm, which is suspected to be the retained right testicle.

ULTRASONOGRAPHIC FINDINGS

- Severely distended, cranially displaced urinary bladder with echogenic urine – suggestive of a urinary tract infection with an obstructed/partially obstructed urinary bladder.
- Irregular, heterogeneous prostate with two large, thick-walled cystic structures – most consistent with severe prostatitis, benign prostatic hypertrophy, and huge para prostatic cysts/abscesses. It is

suspected that these lesions are causing a partial urinary obstruction and are secondarily infected. An underlying prostatic neoplasia cannot be ruled out but is less likely.

- Early hydronephrosis of the left kidney – This could be due to pressure build up and or secondarily pyelonephritis. Recommend urinalysis and culture.
- Small scrotal left testicle with a large caudal intrapelvic abdominal mass thought to be the retained right testicle – The right testicle is suspected to have transformed into a mass effect.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

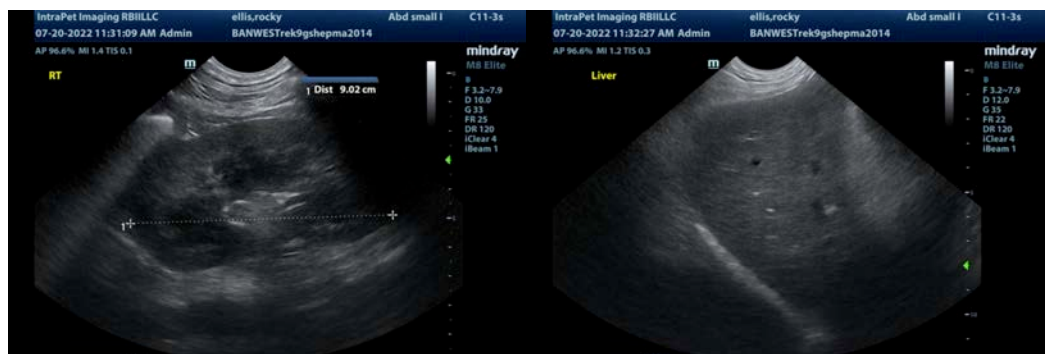
The urogenital tract of this patient is very abnormal, and is difficult to orient with the numerous cystic structures and lack of patient sedation. The urinary bladder appears severely dilated with echogenic urine, and distal to the urinary bladder lies an irregular, heterogeneous area of tissue, most consistent with prostatic tissue. Arising from this region are two large, thick-walled, echogenic cystic structures, most consistent with para prostatic cysts/abscesses. I suspect these lesions are causing partial obstruction.

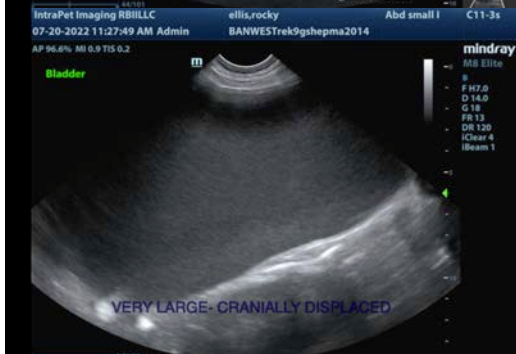
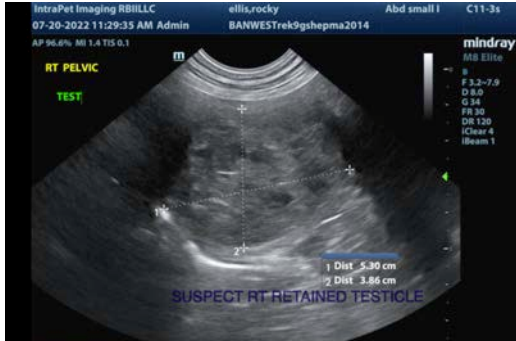
Additionally, there is an intrapelvic mass effect that I suspect to be the retained right testicle. There is concern for possible development of a Sertoli cell tumor seminoma, etc.

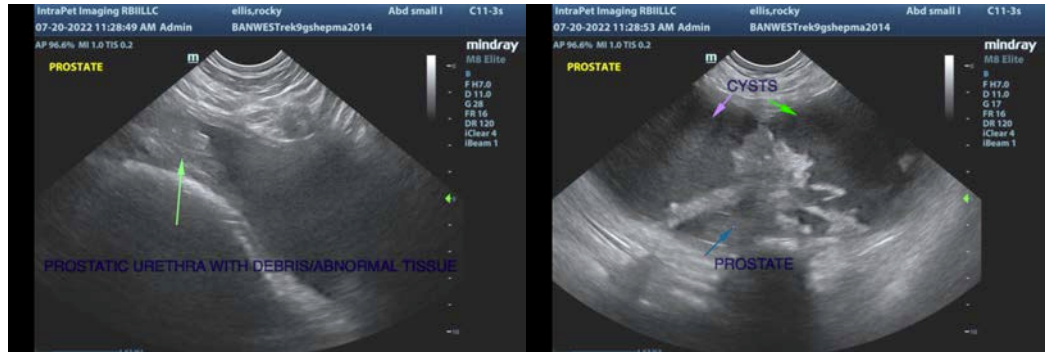
Recommend catheterization of this patient, as the prolonged urinary obstruction can cause urinary incontinence if the bladder is overly stretched. Recommend FNA of the prostate, and intrapelvic mass (retained testicle) to rule out prostatic neoplasia etc... Recommend percutaneous drainage of the cystic structures with samples obtained for culture and cytology. And instillation of baytril into the cystic structures.

Additionally, the patient should be neutered (left testicle and abdominal testicle removed) as resolution of this problem will not occur without neutering.

There is early hydronephrosis of the left kidney. I suspect this is secondary to the urinary obstruction, but this could also be due to pyelonephritis. Recommend culturing the urinary bladder as well as the cystic structures to better plan IV antibiotic therapy.







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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