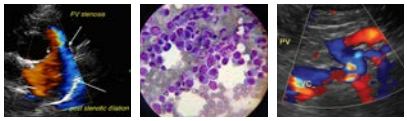
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

10/27/22

PATIENT

Ruby Berry

SPECIES

Canine

BREED

Bloodhound

SEX

Spayed Female

AGE

2/24/14

WEIGHT

80 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Alexander AH

REFERRING VET

Dr. Alexander

INVOICE

42420

PRESENTING CLINICAL SIGNS

7/5/22 O reports urinating in house and frequent straining. UA- 2+ cocci ad patient started on Enrofloxacin x10 days. 7/19/22 recheck urine with O reporting patient still posturing frequently with non productive urinations. UA- no org's. 10/20/22 O reports pt back to urinating in house and frequent non-productive straining outside. Urine C&S- no growth.

Current Medications: None.
Radiographs: 7/27/22 No obvious stones or other abnormms.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is mildly distended with anechoic urine. The distal bladder wall appears relatively normal, but as it approaches the trigone region it becomes severely thickened and irregular with mineralizations. This creates a mass effect in the region of the trigone with extension into the right ureter and the urethra with mineralized tissue within the urethral lumen. The urethra is dilated, measuring 0.78 cm. The right ureter at the level of the bladder is significantly dilated at 1.19 cm, and there is mild hydroureter proximal to the mass lesion measuring at 0.53 cm. The irregular tissue takes up approximately 70% of the bladder wall.

The left kidney has a normal shape and size (6.71 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (6.26 cm) with pyelectasia at 0.32 cm. Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.69 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.

The right adrenal gland is normal in size measuring 0.74 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 mild and primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach is moderately dilated with fluid and irregular shadowing material most consistent with normal ingesta and gas. 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 layering 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

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

ULTRASONOGRAPHIC FINDINGS

- Large, mineralized mass effect in the trigone region with extension into the urethra and right ureter – Findings are extremely concerning for a possible transitional cell carcinoma.

- Right-sided hydroureter and renal pelvic dilation – This is secondary to obstruction of the right ureter at the level of the trigone.

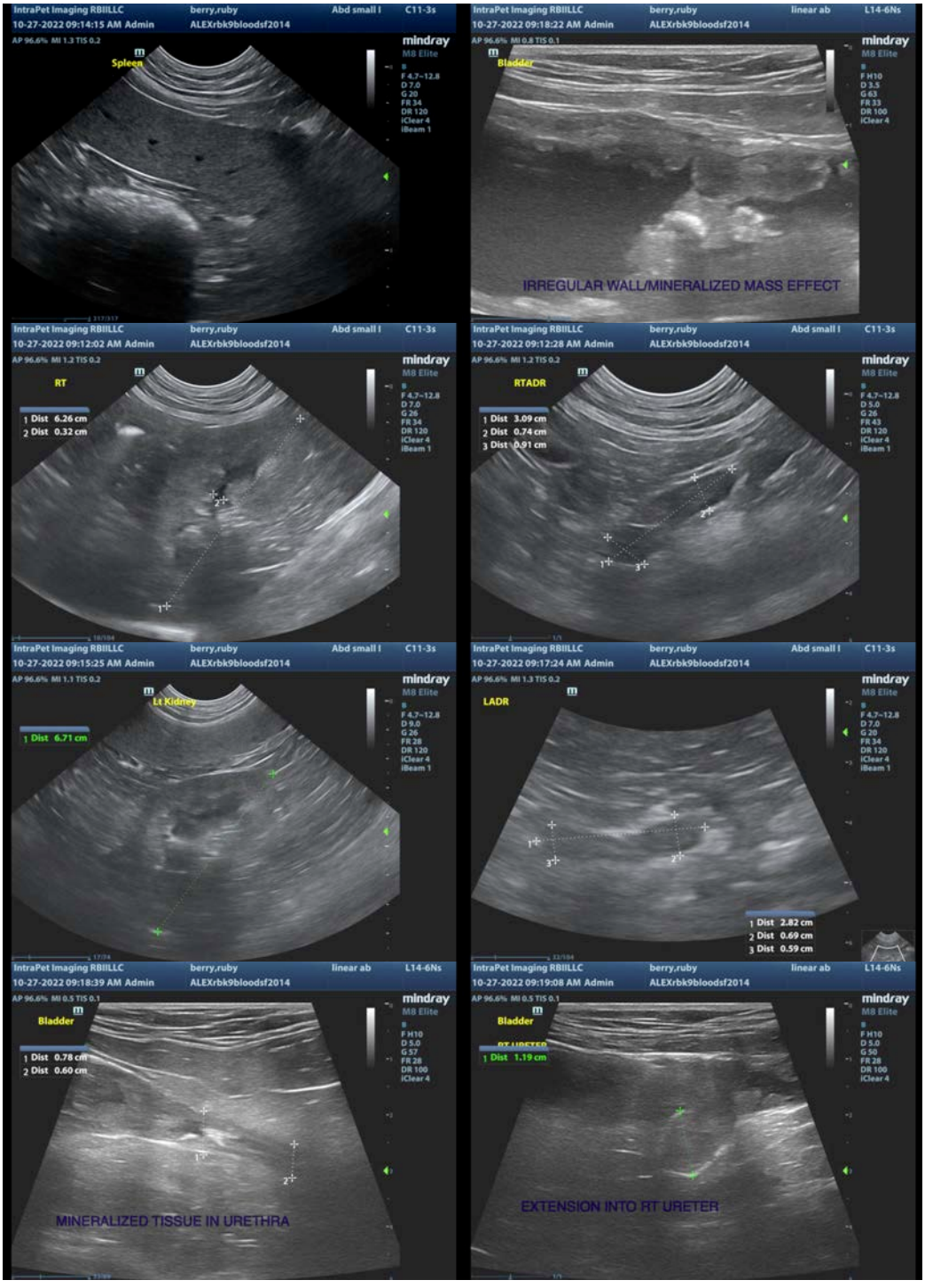
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Unfortunately, there is a large mass effect involving the trigone, proximal urethra, and right ureter. This is extensive and would be a challenge to stent and is not surgically resectable. Consider submitting either a free catch urine sample or a catheterized urine sample for cytology, as I suspect you would be able to obtain cells readily. If not, perform a traumatic catheterization at the level of the proximal urethra/trigone.

Additionally, consider a urine BRAF test. If the test is positive, this greatly increases the likelihood that this is a transitional cell carcinoma. A negative BRAF test would be non-diagnostic.

Consider consultation with a veterinary oncologist once a definitive diagnosis is obtained.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.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M8 Elite
Spleen
IntraPet Imaging RBIIILLC
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M8 Elite
Bladder
IRREGULAR WALL/MINERALIZED MASS EFFECT
IntraPet Imaging RBIIILLC
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C11-3s
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ALEXrbk9bloodsf2014
mindray
M8 Elite
RT
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2 Dist 0.32 cm
IntraPet Imaging RBIIILLC
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mindray
M8 Elite
RTADR
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2 Dist 0.74 cm
3 Dist 0.91 cm
IntraPet Imaging RBIIILLC
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ALEXrbk9bloodsf2014
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M8 Elite
Lt Kidney
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Abd small I
C11-3s
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M8 Elite
LADR
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mindray
M8 Elite
Bladder
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2 Dist 0.60 cm
MINERALIZED TISSUE IN URETHRA
IntraPet Imaging RBIIILLC
berry,ruby
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L14-6Ns
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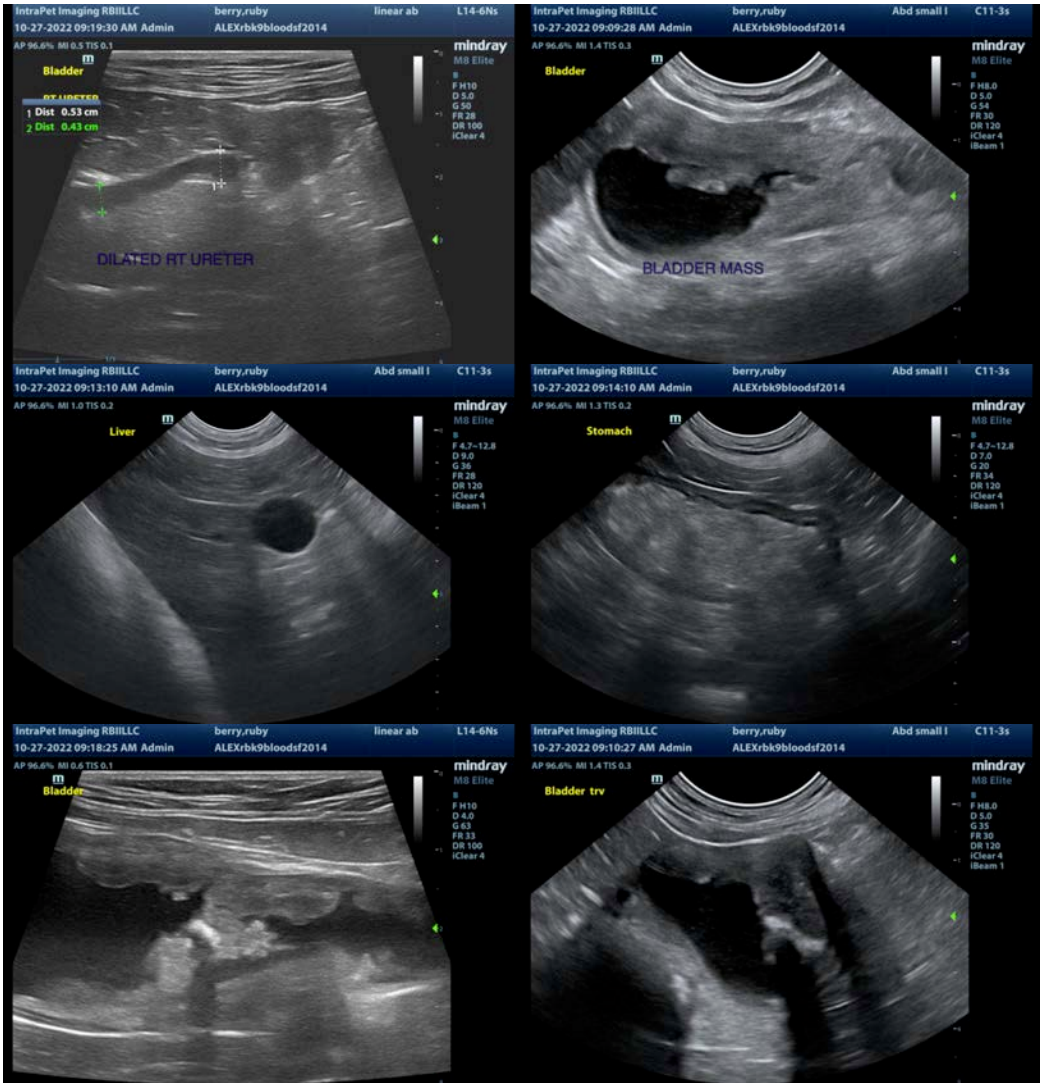
M8 Elite
Bladder
1 Dist 1.19 cm
EXTENSION INTO RT URETER



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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