IMAGING PERFORMED BY

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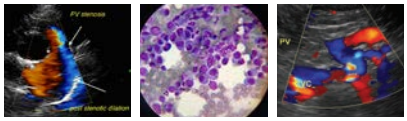


SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

DATE

9/23/22

PATIENT

Domino Nakayama

SPECIES

Canine

BREED

Dalmatian

SEX

Neutered Male

AGE

10/11/10

WEIGHT

40.8 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Stephanie Warga RDCS, RVT

HOSPITAL NAME

Edgewood Vet Hospital

REFERRING VET

Dr. Wright

INVOICE

41617

PRESENTING CLINICAL SIGNS

Chronic straining to urinate, decreased appetite. Urine culture was negative.

Current Medications: Galliprant 60mg -- 1/2 tablet SID, Proin 50mg -- 1 BID, Fluoxetine 20mg -- 1 SID, Trazodone 100mg -- as needed
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 to moderately distended with anechoic urine. The apical bladder wall appears of normal thickness with mild mucosal irregularity, but there is significant focal irregularity and thickening and the cystourethral junction, creating a mass effect that measures approximately 0.66 cm x 1.53 cm. This abnormal tissue/thickening extends into the pre-prostatic urethra to an abnormal prostate. Ventrolateral to the urinary bladder at the cystourethral junction is a hypoechoic structure measuring 1.29 cm in diameter, which is most consistent with a hypoechoic lymph node. Additionally, an echogenic cystic structure is possible, as this lesion contacts both the bladder wall and the prostate.

The prostate is large and severely irregular with numerous focal hypoechoic nodules. The prostate measures 3.6 cm x 3.06 cm and has numerous nodules varying in size from approximately 0.60-1.2 cm. The pre- and post-prostatic urethra appear thickened and irregular.

The left kidney has a normal shape and size (6.48 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 (6.01 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.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.51 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 0.72 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. Mild hyperechoic dependent sandy debris/mineralized debris is present. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains mild fluid. 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

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.

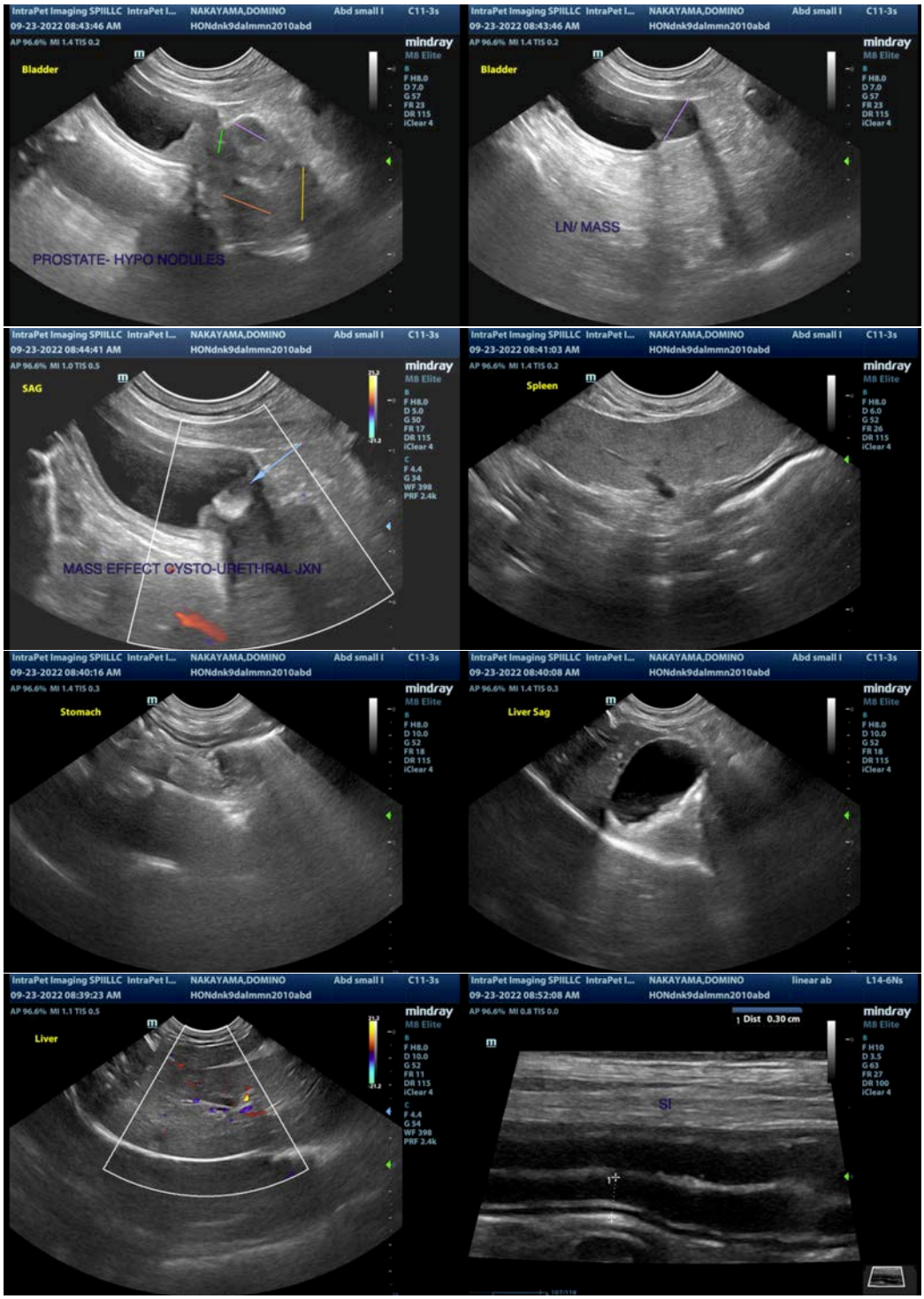
ULTRASONOGRAPHIC FINDINGS

- Focal irregularity/mass effect at the cystourethral junction extending into the abnormal prostate – most consistent with neoplastic extension into the urinary bladder from the prostate.
- Large, irregular, nodular prostate – very concerning for prostatic neoplasia. Recommend a fine needle aspirate.
- Hyperechoic dependent debris in the gallbladder – most consistent with gallbladder sand/small stones.
- Hypoechoic structure near the cystourethral junction in the urinary bladder – This lesion could represent an enlarged local lymph node, or a mass/cystic structure associated with the prostate/bladder.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The prostate is large and irregular with numerous distinct hypoechoic cysts. Findings are very concerning for an underlying neoplastic process. This abnormal tissue extends into the pre-prostatic urethra and into the urinary bladder at the cystourethral junction. Recommend a fine needle aspirate of the prostate. If this is not diagnostic, consider a traumatic catheterization at the level of the prostate/cystourethral junction.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.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mindray
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Bladder
PROSTATE- HYPO NODULES
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MASS EFFECT CYSTO-URETHRAL JXN
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1 Dist 0.30 cm
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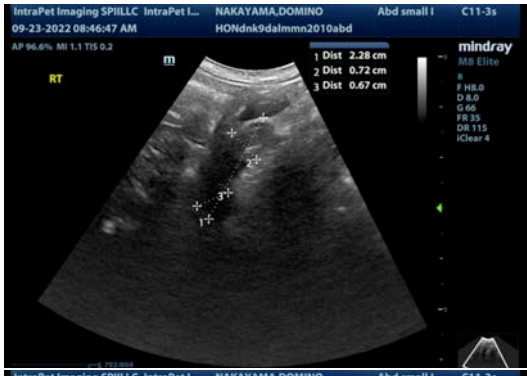
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3 Dist 0.67 cm
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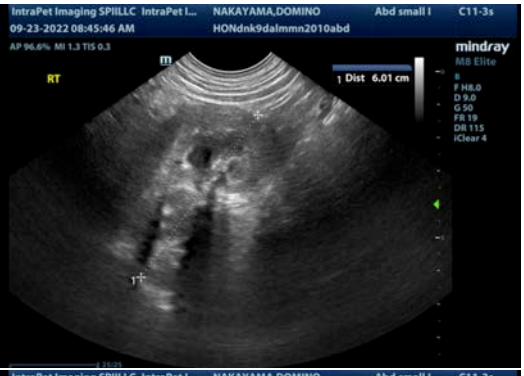
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MB Elite


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PROSTATE
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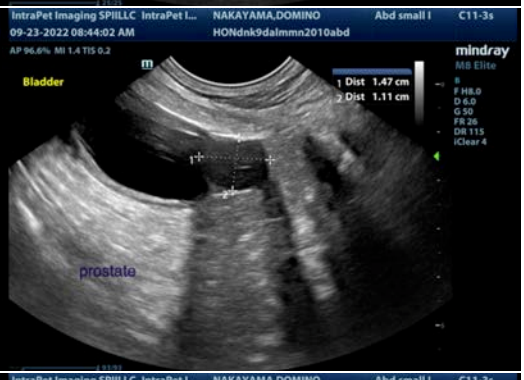
MB Elite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Bladder
1 Dist 1.47 cm
2 Dist 1.11 cm
prostate
mindray
MB Elite


IntraPet Imaging SPIIILLC IntraPet I...
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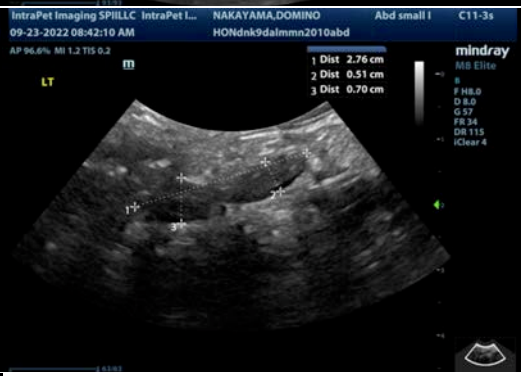
mindray
MB Elite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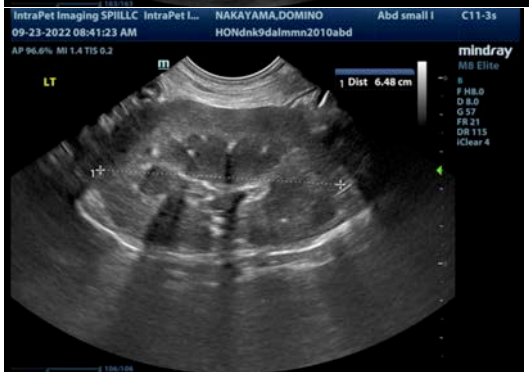
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LT
1 Dist 6.48 cm
mindray
MB Elite

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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
kathleen.sennello@sonopath.com