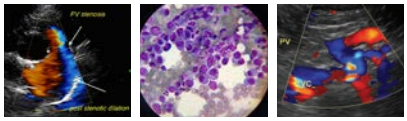
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

2/14/23

PATIENT

Thor Bowen

SPECIES

Canine

BREED

Pit X

SEX

Neutered Male

AGE

1/1/14

WEIGHT

71.2 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Charm City VH

REFERRING VET

Dr. Hanse

INVOICE

45143

PRESENTING CLINICAL SIGNS

One year history of intermittent hematuria. Has been passing large clots of blood recently. Firm mass in caudal abdomen.

Current Medications: Marbofloxacin 2.75 mg/kg SID - 3 days, Meloxicam 0.1 mg/kg SID.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Patient sedated with Torbugesic.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is mildly distended with anechoic urine. The bladder lumen is distended with a large, solid, mixed echogenic mass effect measuring approximately 5.79 cm x 4.28 cm. This lesion appears to occupy approximately 95% of the bladder lumen, leaving little residual space with this level of bladder distention. The bladder wall measures at 0.43 cm. There is minimal color flow when using power doppler, so this could represent an avascular tumor or less likely a large clot. The area of the trigone and proximal urethra appear free of any mass lesions, calculi, etc.

The prostate is large, measuring 2.9 cm x 4.17 cm. It is slightly heterogeneous and there is a very small parenchymal cyst measuring 0.49 cm x 0.26 cm, and two small mineralizations visualized. External margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, or mass effect.

The left kidney has a normal shape and size (8.23 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 (8.55 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 0.77 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 0.70 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 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 area of 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

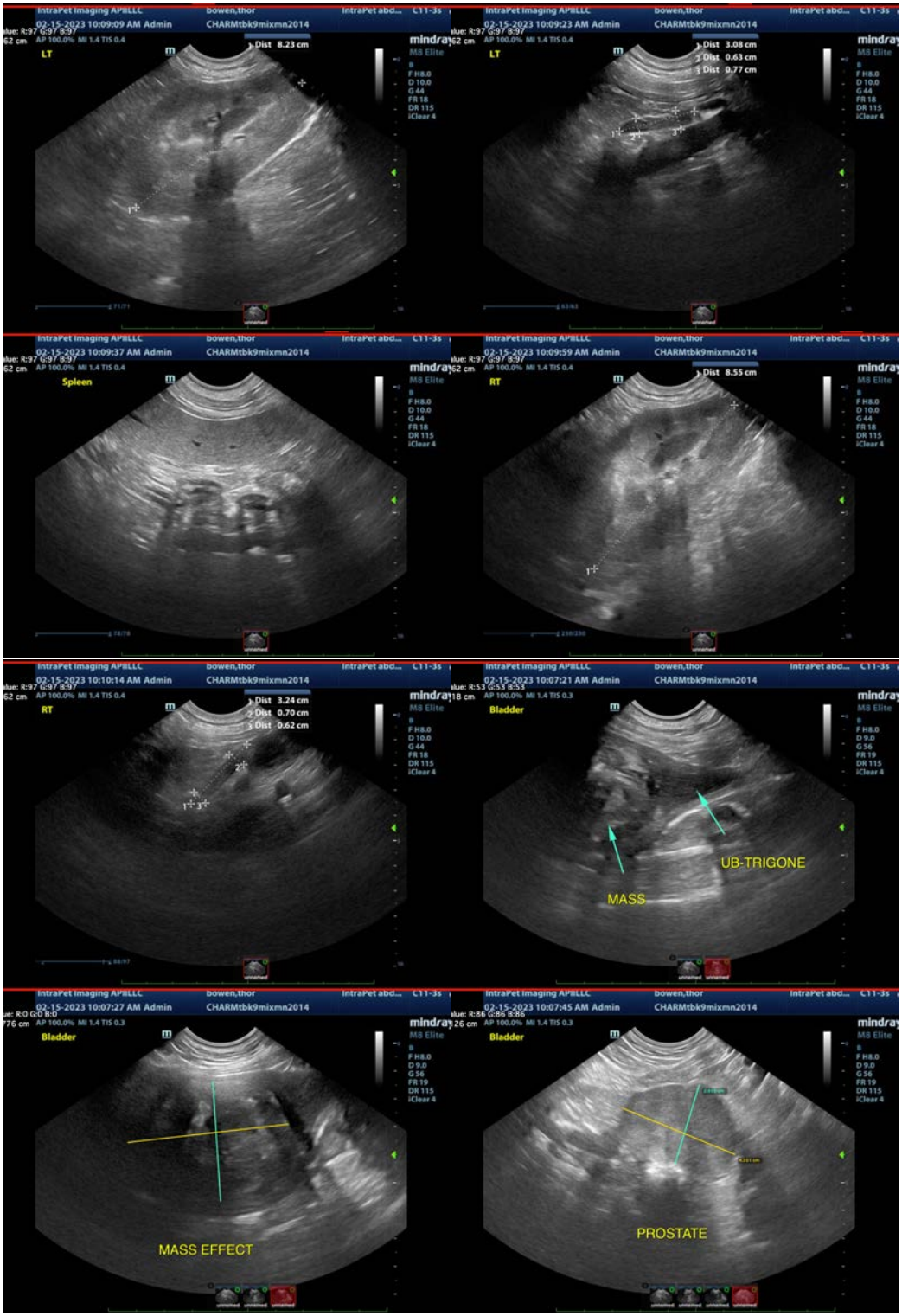
- Large, mixed echogenic mass effect within the urinary bladder – This mass effect appears to have low vascularity based on color flow. A neoplastic mass lesion is the primary differential, although a clot or other mass effect is possible. Recommend traumatic catheterization.

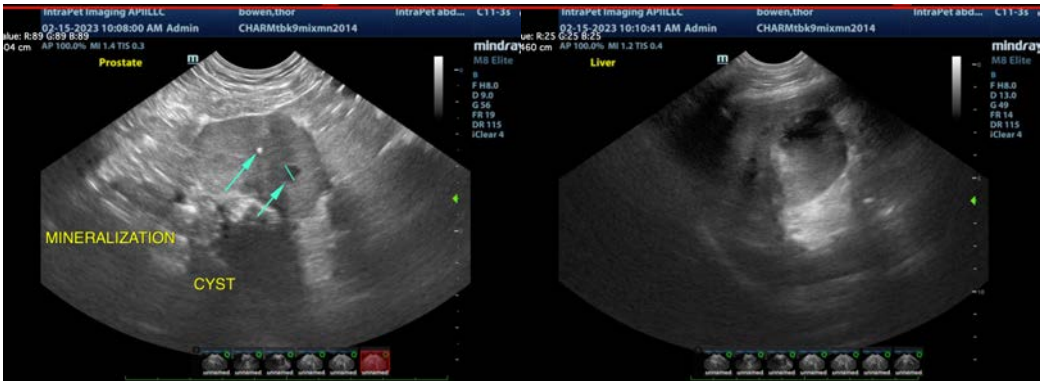
- Lage prostate with a small cyst and small mineralizations – Correlate these findings with the age of neuter. If this patient was neutered prior to puberty, this is abnormal, and a fine needle aspirate should be considered. If this patient was neutered later in life, the mineralizations are still concerning, but the overall appearance of the prostate is fairly symmetrical, but considering the bladder findings a fine needle aspirate would likely still be recommended.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The urinary bladder is significantly distended with a solid mass effect. There is very little additional space for urine at this level of distention, but no evidence of obstruction of the ureters at this time. With minimal color flow, it is impossible to differentiate this from a clot, although this would seem less likely than a primary mass effect. Recommend a traumatic catheterization. Additionally, consider a fine needle aspirate of the prostate, as there are some mineralizations and a small cystic structure, which could be atypical, although no significant irregularity exists. A urinalysis and culture is recommended, and 3-view thoracic radiographs.

The remainder of the scan appears relatively normal for a 9 year old canine.


LT
Dist 8.23 cm
LT
Dist 3.08 cm
Dist 0.63 cm
Dist 0.77 cm
Spleen
RT
Dist 8.55 cm
RT
Dist 3.24 cm
Dist 0.70 cm
Dist 0.62 cm
Bladder
UB-TRIGONE
MASS
Bladder
MASS EFFECT
Bladder
PROSTATE



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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