

**DATE PRESENTING CLINICAL SIGNS**

1/13/22 History: Urinating blood.

PATIENTCurrent Medications: Cephalexin 500 mg, Previcox 227 mg.
Lab Results: Attached separately.

Cam Cawthorne

Radiographs: NSF on radiographs, no stones seen.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

SPECIES

Canine

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**BREED**

Pit Bull Terrier

Urinary System

The urinary bladder is moderately distended with anechoic urine. The bladder is irregular, particularly in the apical and ventral portions of the urinary bladder. There is a focal, somewhat pedunculated mass effect visualized in the apical ventral portion of the urinary bladder, measuring 2.02 cm x 2.4 cm. The area of the trigone, ureteral papillae and proximal urethra (to a depth of 2cm) appear relatively normal with no large mass effects or calculi visualized. There is some mild mucosal irregularity in this area. Findings are most consistent with a large apical bladder tumor. Other differentials are possible.

SEX

Neutered Male

AGE

1/31/10

The prostate is normal in size (1.25 cm) and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

WEIGHT

56.6 Pounds

The left kidney has a normal shape and size (6.91 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.

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

The right kidney has a normal shape and size (6.37 cm) with rare non-obstructive nephroliths. 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, infarcts or hydroureter. Renal vasculature is normal.

IMAGING PERFORMED BY

Rachel Brilhart RDMS

Adrenal Glands

The left adrenal gland is normal in size measuring 0.72 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.

HOSPITAL NAME

AH at Southgate

The right adrenal gland is normal in size measuring 0.88 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.

REFERRING VET

Dr. Alexander

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.

INVOICE

34221

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 gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a mild amount of non-organized echogenic debris. 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

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.

PRIMARY FINDINGS

- Large mass effect within the urinary bladder – most consistent with a transitional cell carcinoma, although other possibilities exist.

SECONDARY FINDINGS

- Mild gallbladder sludge – The significance of the aggregated gallbladder sludge is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The focal mass in the bladder has the characteristics most consistent with a neoplastic lesion, but polyps and inflammatory lesions can sometimes have a similar appearance. A definitive diagnosis cannot be determined by ultrasound alone.

-Recommend urine evaluation for BRAF mutation seen in patients with transitional cell carcinomas. A positive test is diagnostic, a negative test is inconclusive and will need further diagnostics.

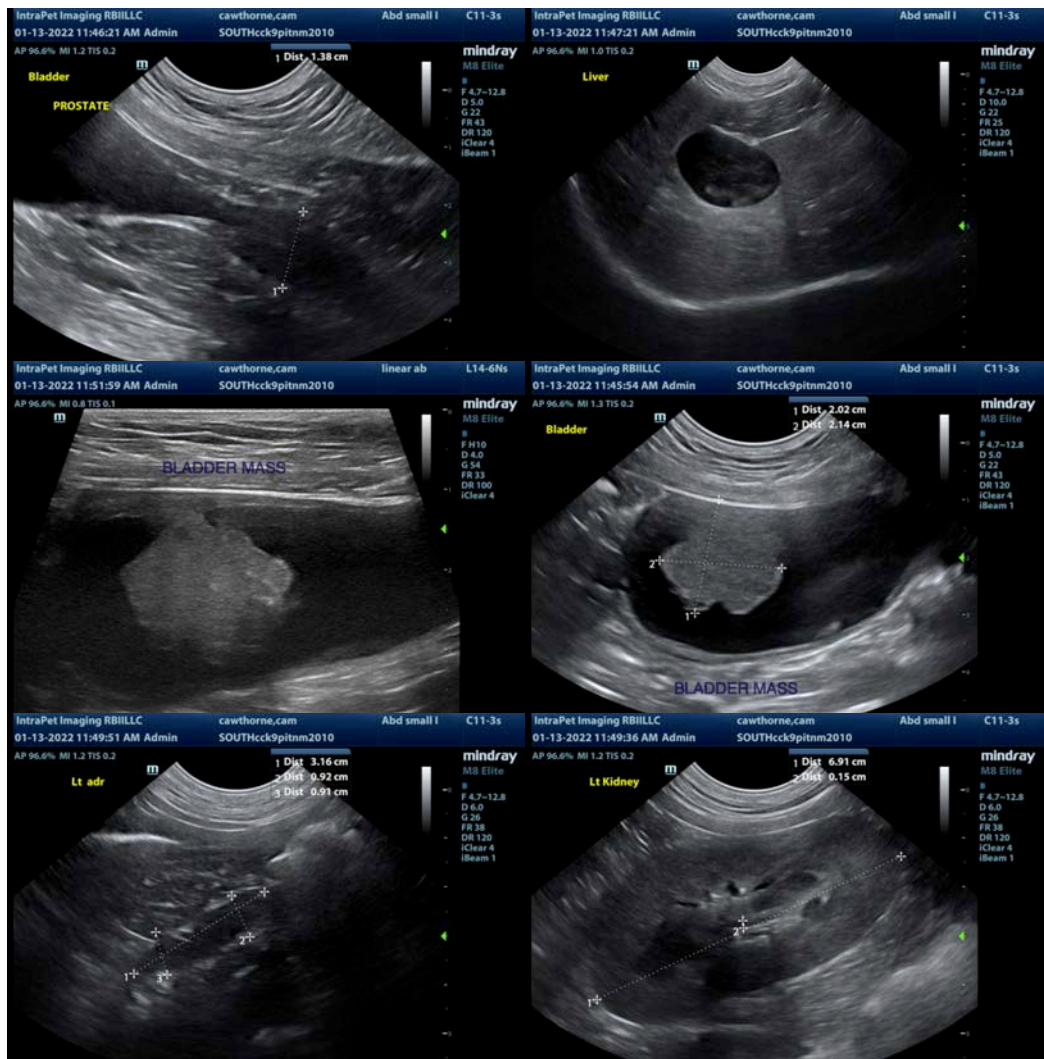
-If negative or non-diagnostic BRAF consider traumatic catheterization to obtain representative cells for cytology, or biopsy sampling via either cystoscopy (if a female) or surgery.

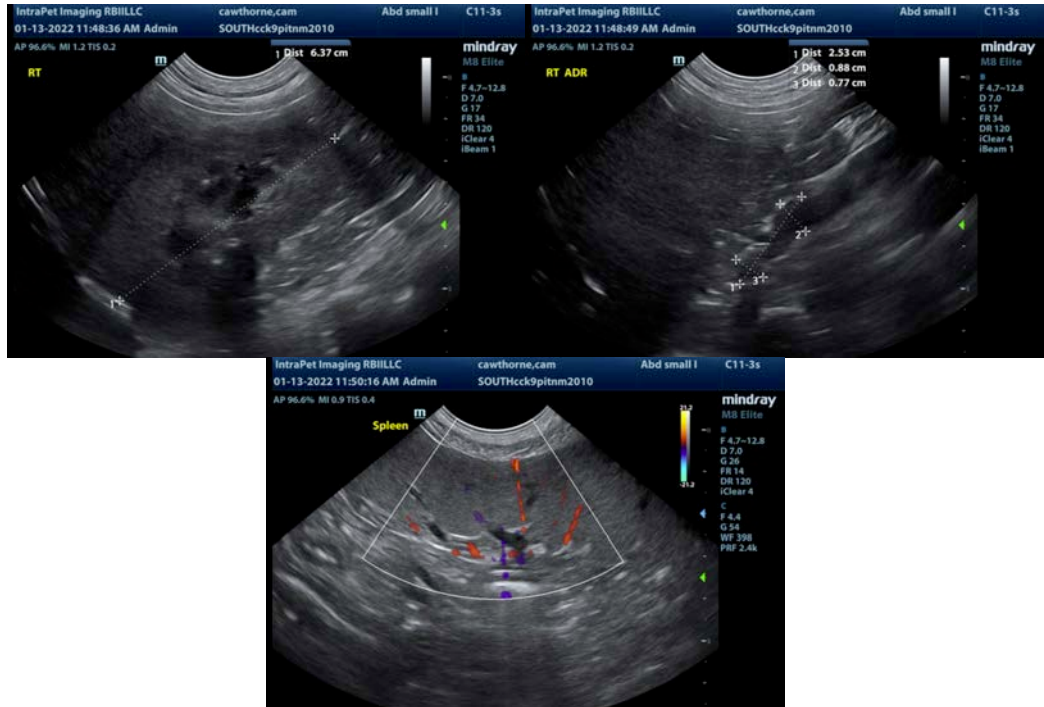
-Patients with bladder pathology should always have urinalysis and culture performed. Ideally cystocentesis should be avoided in patients with suspected bladder masses to try and prevent tracking of tumor cells along the needle path.

-If TCC is confirmed consider referral to/consultation with a board certified. Veterinary oncologist for recommendations regarding treatment options and prognosis.

This mass effect is in a relatively good position, in that it does not appear close to the trigone or ureteral papillae, making the likelihood of an imminent urinary obstruction very low. I strongly recommend consultation with a veterinary oncologist once diagnosis is confirmed, as this pet may have a better prognosis than most due to mass location.

Recommend 3-view thoracic radiographs.





The information and recommendations provided are based on the images presented by the referring veterinarian. 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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