

**DATE PRESENTING CLINICAL SIGNS**

9/28/21

Owner noticed blood in the urine. Radiographs show probable uroliths and a couple of possible ureteroliths? Want to confirm these before surgery and make sure no other issues noted in the abdomen.

PATIENT

Current Medications: None.

Murr Young

Lab Results & Radiographs: bloodwork and radiographs will be emailed to intrapetstaff.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not needed.

Stat Report: Not requested.

SPECIES

Feline

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**BREED**

DSH

Urinary System

The urinary bladder is moderately distended with mildly echogenic urine. The Bladder wall is severely thickened in the apical/ventral portion of the urinary bladder, measuring up to 1.3 cm in thickness and extending at least 3.0 cm in length. This thickening appears primarily submucosal, and there may be superficial mineralization. There is a pedunculated soft tissue density structure, which could represent intraluminal extension of the abnormal tissue. The trigone and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi. The ureter is not clearly visualized. There is a scant amount of free fluid surrounding the urinary bladder, and the omentum in this area is very inflamed.

SEX

Neutered Male

AGE

2009

The left kidney has a normal shape and size (3.88 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.

WEIGHT

12 Pounds

The right kidney has a normal shape and size (3.86 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 BY

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Medicine)

HOSPITAL NAME

Cat Sense Feline
Hospital & Boarding

Adrenal Glands

The left adrenal gland is normal in size measuring 0.36 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 0.44 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. Sinclair

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

25849

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 <0.36cm 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 0.13-0.38cm in wall thickness) and the jejunum measured as normal (between 0.15-0.36cm.) 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

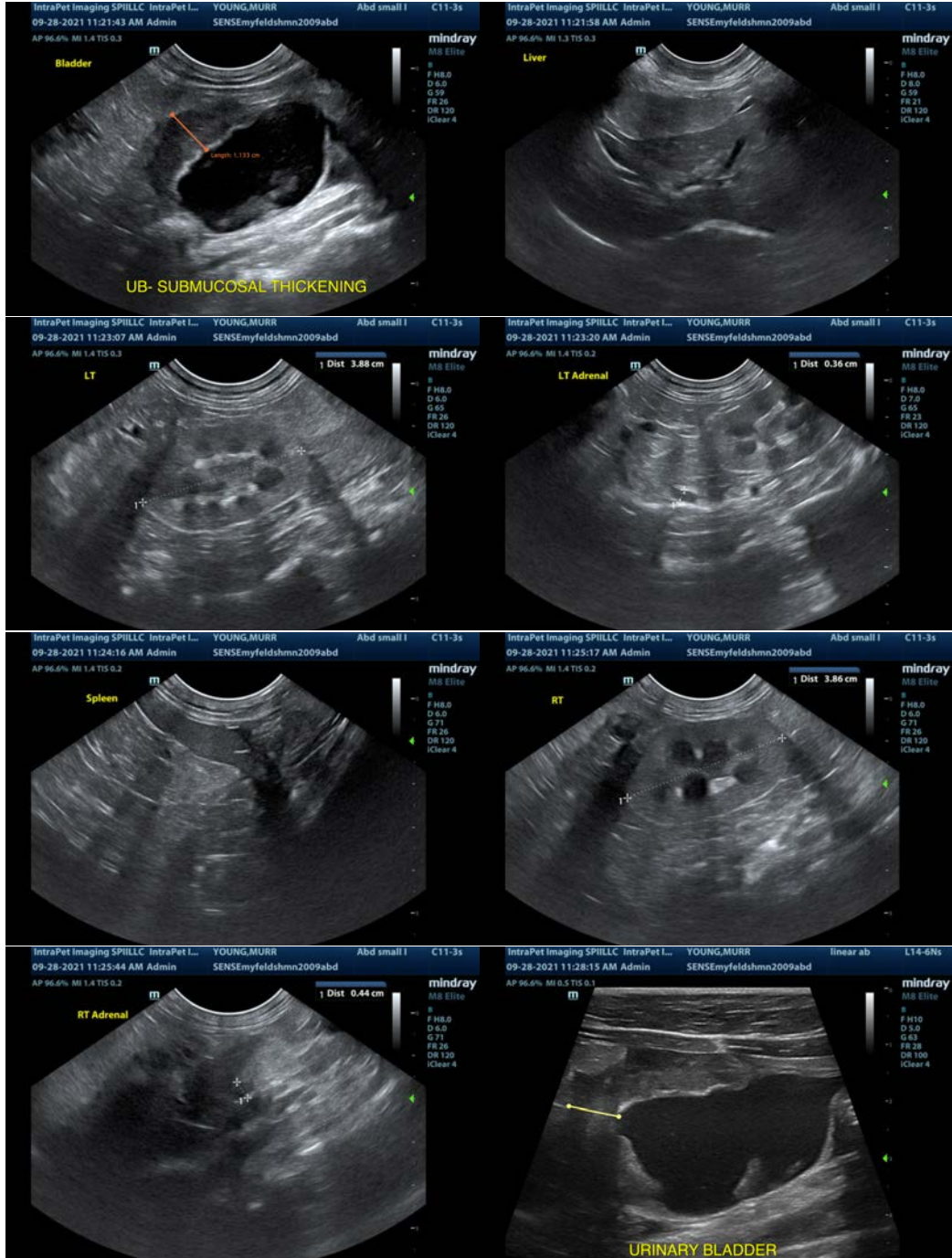
Evaluation of the peritoneal cavity revealed small volume anechoic free fluid. The free fluid is visualized around the urinary bladder, the spleen, and a few wisps near the liver. No mesenteric lymphadenopathy. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of increased echogenicity, particularly around the urinary bladder mass effect.

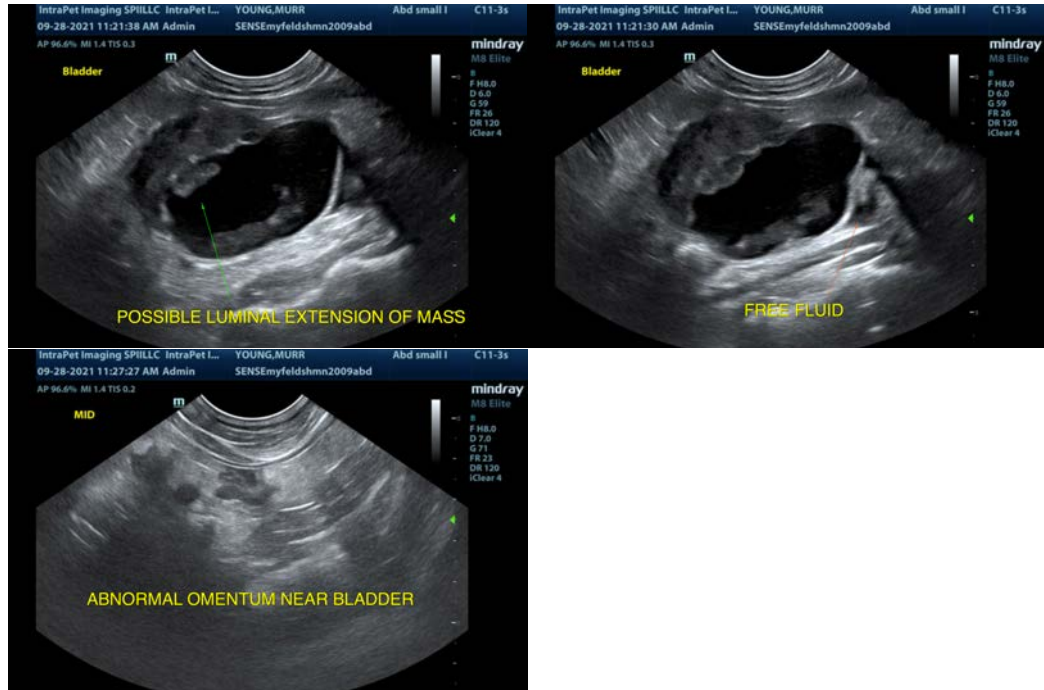
ULTRASONOGRAPHIC FINDINGS

- Thickened intramural mass effect involving the apical/ventral portion of the urinary bladder – This is an atypical presentation for a bladder mass. Nonetheless, neoplasia is a very high concern. Recommend urinalysis, culture and biopsy.
- Free abdominal fluid – likely associated with inflammatory changes, cannot rule out uroabdomen (seems very unlikely).

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The bladder wall is very abnormal and thickened apically. This thickening appears to extend outwardly, making a mass effect. There appears to be some minor luminal involvement as well. Concern is high for neoplasia, but this is a very atypical presentation. Consider referral to a veterinary surgeon for surgical exploration and biopsies +/- resection if possible. Suspect the mineralization observed on radiographs is mineralization of the mucosal wall of the abnormal tissue. No discrete stones are observed. Alternately, this could be severe cystitis, but this is a more discrete focal lesion than would be expected. 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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