



DATE PRESENTING CLINICAL SIGNS

1/30/2026

Patient History: Tyrion is a 5 year old MN DSH that presented 1 month ago for lethargy. Elevated renal values which improved with IV fluid therapy. Pet's values were normalizing and he was doing well but regressed again today 1/29/26. BUN 80, Creatinine 8, Phosphorus 8.8

PATIENT

Tyrion Myers

Current Medications: SubQ fluids 100 ml LRS, 8 mg of Cerenia SID. Finished 2 weeks of phosphate binder but phosphorus increased again on today's values.

SPECIES

Feline

Labwork Results: Labwork not attached, reported as: PE unremarkable. BUN 80, Creatinine 8, Phosphorus 8.8.

BREED

DSH

Date of Previous IntraPet Ultrasound: No previous.

SEX

MN

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed by: Rachel Brillhart, RDMS.

AGE

5 years

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

WEIGHT

10 lbs

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities or masses. In the dependent portion of the urinary bladder there's a small line of hyperechoic dependent debris, most consistent with mineralized sandy debris.

INTERPRETED BY

Kathleen Sennello DVM,
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(Small Animal Internal
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The left kidney is large in size (4.83 cm). The cortex is hyperechoic with mildly reduced corticomedullary distinction. There is significant pyelectasia visualized measuring 1.08 cm, with numerous small mineralizations/small nephroliths visualized at the perimeter of the renal pelvis. The ureter is dilated measuring at 0.3 cm with a partially obstructed ureterolith visualized measuring 0.64 cm x 0.26 cm.

HOSPITAL NAME

Banfield Abingdon

The right kidney is large in size (4.44 cm). The cortex is hyperechoic with mildly reduced corticomedullary distinction. There's severe pyelectasia at 0.74 cm with at least two small nephroliths visualized at the edge of the renal pelvis measuring 0.23 cm, and 0.27 cm. The ureter is dilated proximally at the level of the kidney measuring 0.31 cm. Distally, there is a ureterolith measuring 0.33 cm x 0.19 cm. Ureter measures at 0.27 cm at the level of the partial obstruction.

REFERRING VET

Dr. Pagan

Adrenal Glands

INVOICE

11213

The left adrenal gland is normal in size measuring 0.37 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 0.61 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 (0.48 cm) 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 gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and likely incidental at this time. 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 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

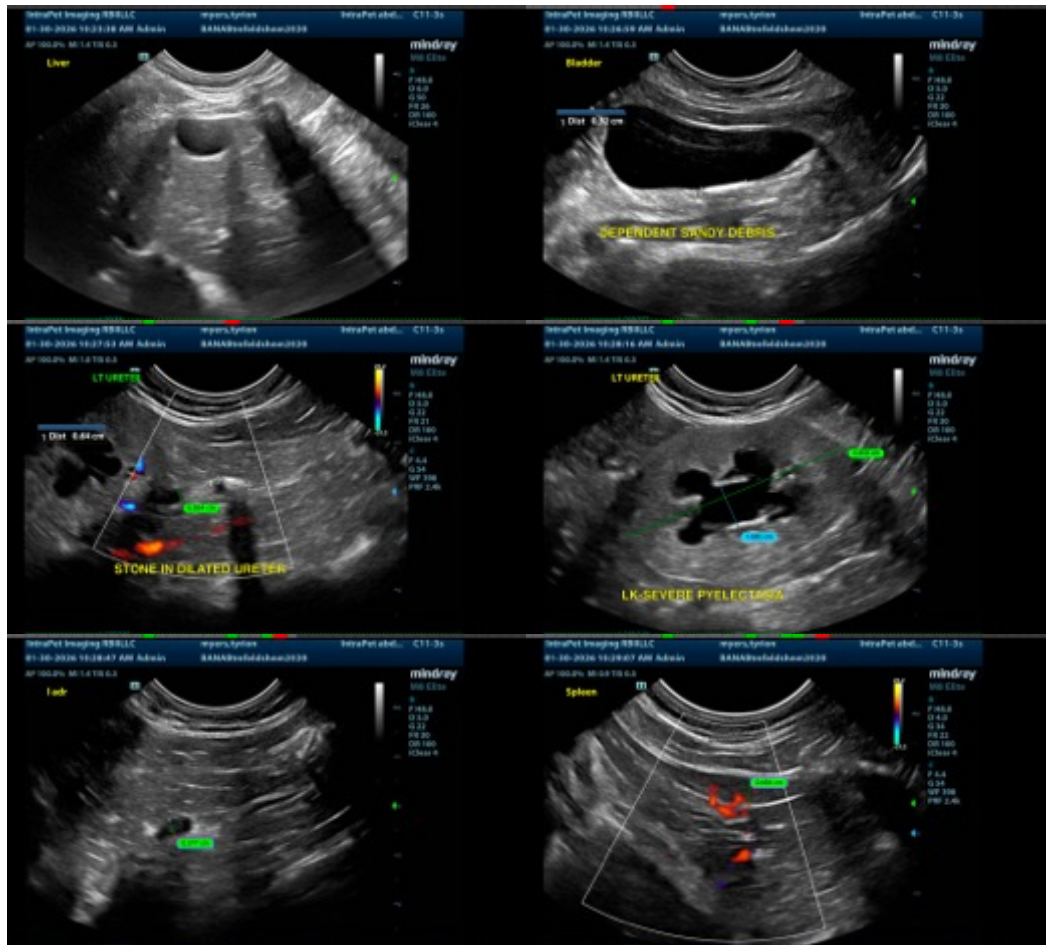
- Bilateral severe pyelectasia and hydroureter with obstructive/partially obstructive ureteroliths.
- Dependent mineralized/sandy debris visualized in the urinary bladder.

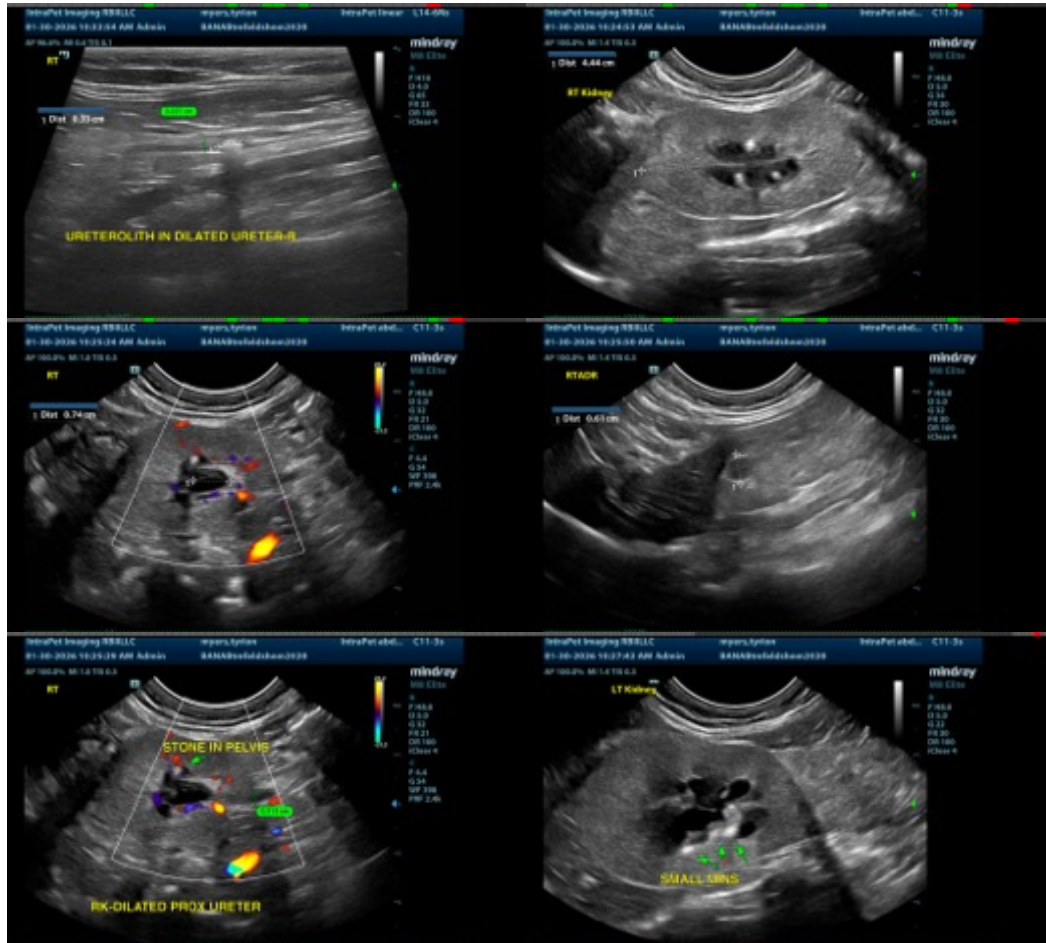
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Both kidneys appear at least partially obstructed with severe pyelectasia, hydroureter, and obstructive/partially obstructive nephroliths. Options moving forward could include repeat medical therapy with symptomatic therapy, diuresis, smooth muscle relaxants, pain medications, etc. Additionally, a urine culture should be performed and concurrent treatment for pyelonephritis while awaiting culture results.

Serial monitoring of the renal values and ureteroliths is recommended. These are fairly proximal stones so passing them may be challenging. There's always the possibility that this represents a clump of sandy debris rather than a stone but prognosis for passing is guarded. While initiating medical therapy, recommend consultation regarding possible subcutaneous ureteral bypass procedure to determine where this can be done, if your client is interested, etc., and what preparations would need to be considered.

If this patient has a history of infections, or urinalysis gives a clue as to the type of stones present, you could consider trying dissolution therapy (if struvite stones are suspected.) Calcium oxalate stones would be most likely which cannot be dissolved but possibly a diet to reduce formation could be considered.





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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