

**DATE PRESENTING CLINICAL SIGNS**

8/27/21

History: Patient presented for bloody urine 7/8/21 for routine examination and noted an incisor tooth needing extracted. On 8/5/21 blood and urine were submitted to Antech for procedure - owner had also noted bloody urine at this time. Owner later elected further treatments (tick panel, 4dx) and elected treating with broad spectrum abx. Owner called 8/23/21 stating that patient continues to urinate blood and requested an ultrasound. On S/O urinary diet.

PATIENT

Peper Weaver

SPECIES

Canine

BREED

Corgi

SEX

Neutered Male

AGE

3/26/10

WEIGHT

30.6 Pounds

INTERPRETED BY

Kathleen Sennello DVM,
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(Small Animal Internal
Medicine)

HOSPITAL NAME

Fullerton AH

REFERRING VET

Dr. Stock

INVOICE

25024

Current Medications: Doxycycline 100mg BID since ~8/5/21.

Lab Results: Increased WBC 30.4 (4.0-15.5), Lym 13984 (690-4500), Mon 912 (0-840), Neut 15200 (2060-10600), Urine 3+ blood, normal CHEM.

Radiographs: Not provided by the veterinarian.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Not needed.

Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder is moderately distended with anechoic urine. The Bladder wall is diffusely thickened and irregular, measuring approximately 0.45 cm. There are numerous well defined, shadowing stones in the dependent portion of the urinary bladder (Suspect 4-10 stones measuring from 0.39-0.6 cm). Additionally, there is a stone in the urethra anterior cranial to the prostate, measuring 0.43 cm. No masses are observed.

The prostate is normal in size (0.9 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.

The left kidney has a normal shape and size (6.73 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.

The right kidney has a normal shape and size (5.9 cm). Overall echogenicity is slightly hyperechoic with poor 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.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.39 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 0.52 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 mildly heterogenous in echotexture with subtle, indistinct focal mottling. 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. Jejunum wall measured 0.32 cm. 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. There is a mild lymphadenomegaly present. Mesenteric lymph nodes are visualized near the urinary bladder measuring 0.64, 0.52 cm. 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

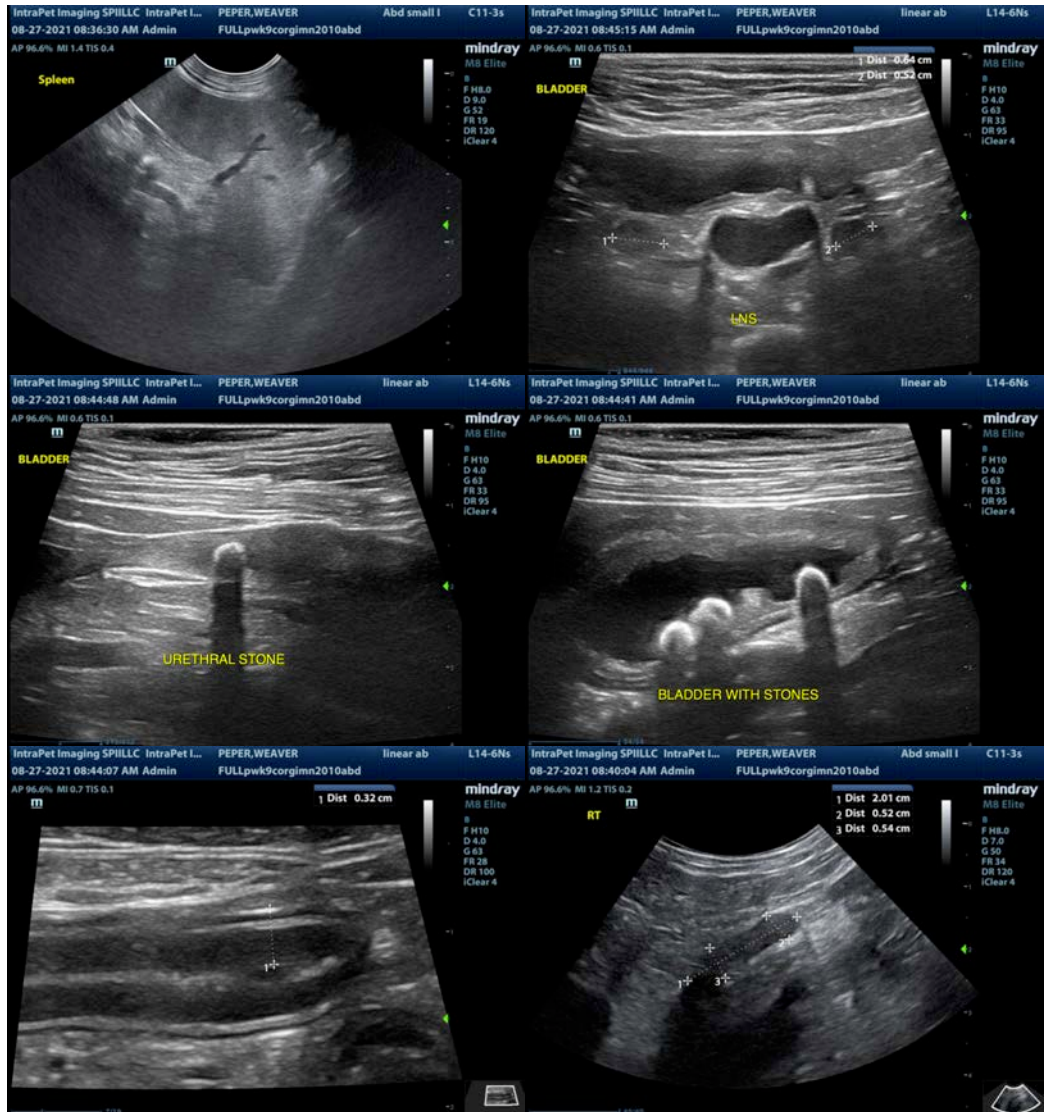
- Irregular bladder wall with numerous calculi visualized – correlate with radiographs. Recommend urinalysis and culture.
- Urethral stone – There is a stone visualized proximal to the prostate.
- Mild mesenteric lymphadenopathy – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

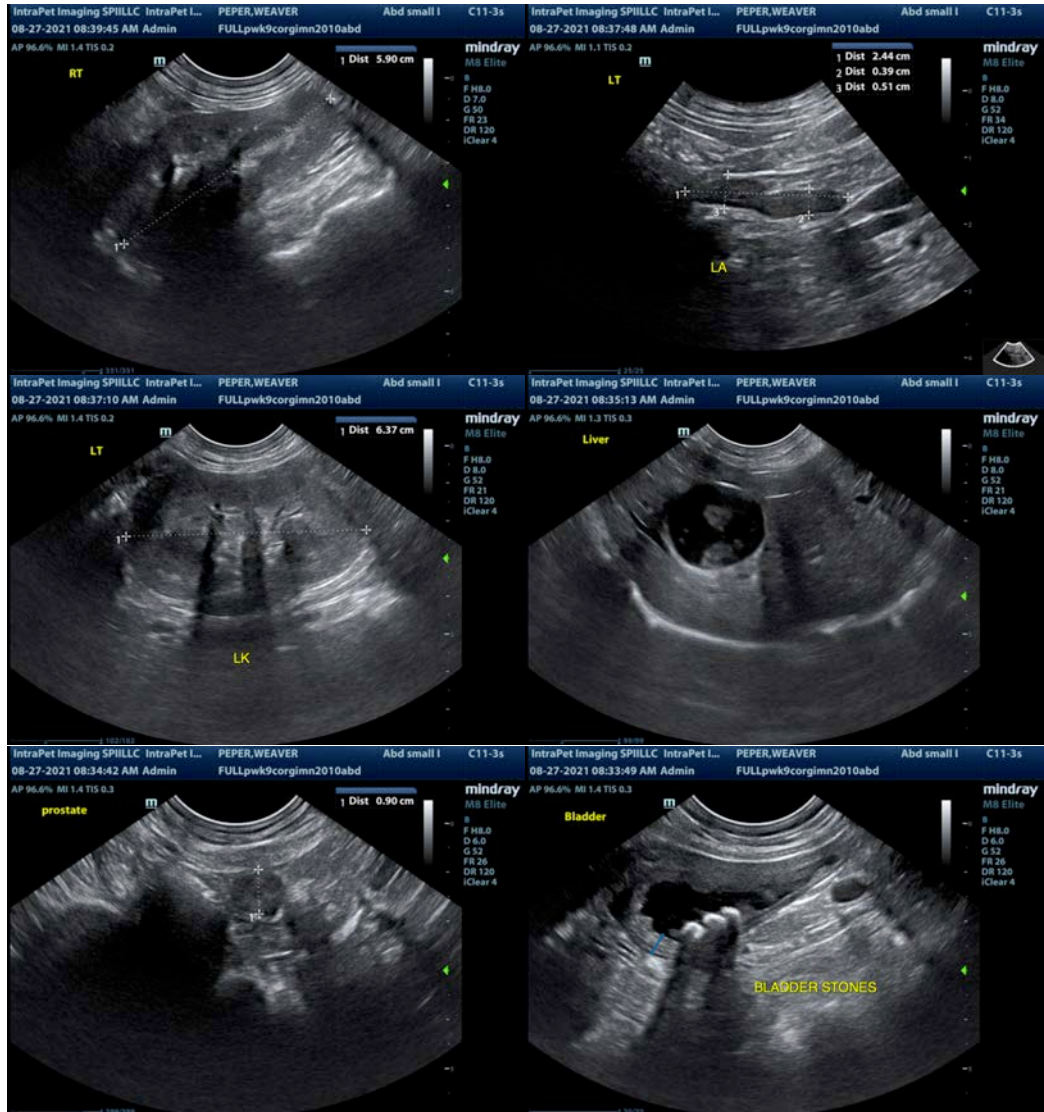
SECONDARY FINDINGS

- Mildly heterogeneous liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.
- Decreased corticomedullary distinction in both kidneys – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There are a large number of discreet stones within the urinary bladder and one additional stone visualized in the urethra. Recommend radiographs to get an accurate count and size estimation. Recommend passing a catheter to see if the urethral stone can be retropulsed into the urinary bladder. Unfortunately, I believe this case will require cystostomy and careful evaluation of the distal urethra with radiographs to make sure there aren't stones distal to the prostate. Recommend urinalysis and culture.





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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