

**DATE PRESENTING CLINICAL SIGNS**

5/10/22

Bloody urine after dental. Also has IBD, Colitis. History of hepatopathy.

PATIENT

Current Medications: Clavamox 62.5mg 1.5 BID, Denamarin 90mg SID.

Date of Previous IntraPet Ultrasound: 6/8/21. See attached.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Braxton Blowe

Imaging Performed By: Stephanie Pearce RDCS, RVT.

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder and visible portion of the pelvic urethra are normal for the degree of luminal distension. The urine is anechoic with no evidence of debris. Cystic calculi and discrete masses are not observed. The region of the trigone and proximal urethra, visible to a depth of 2 cm, are normal.

BREED

Yorkshire terrier

The prostate is normal in size (0.58 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

SEX

Male, neutered

The left kidney is normal size (4.36 cm in length); normal shape and architecture with smooth peripheral margins. The cortex is mildly thickened and there is moderate loss of corticomedullary distinction.

AGE

11/30/2009

Hyperechoic shadowing diverticular foci are visualized. Pinpoint hyperechoic foci are observed throughout the cortex. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

WEIGHT

13.7 lbs.

The right kidney is normal size (3.62 cm in length); normal shape and architecture with smooth peripheral margins. The cortex is mildly thickened and there is moderate loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. Pinpoint hyperechoic foci are observed throughout the cortex. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

INTERPRETED BY

Andrea Nicastro, DVM,
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Adrenal Glands

The left adrenal gland is normal size (0.46 cm at cranial pole) (0.52 cm at caudal pole) (1.50 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

HOSPITAL NAME

Banfield Abingdon

The right adrenal gland is mildly enlarged (0.61 cm at cranial pole) (0.61 cm at caudal pole) (1.66 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

REFERRING VET

Dr. Simpson

Spleen

The spleen is normal in size (1.00 cm in width at the level of the hilus) with a slightly irregular lateral contour. A 0.86 x 0.65 cm irregular, heterogeneous, slightly cavitated nodule is observed at the cranial lateral aspect. The lesion causes mild capsular expansion. The remaining parenchyma is homogeneous. Splenic vasculature is normal with no evidence of thrombosis.

INVOICE

13353

Liver

The liver is subjectively enlarged with swollen peripheral contours. The parenchyma is hyperechoic relative to the spleen with numerous small hypoechoic nodules throughout the organ. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is normal in thickness. A moderate amount of aggregated echogenic suspended sludge in a partially stellate pattern is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

Pancreas

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

Free Abdomen

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- An obvious cause for the patient's hematuria is not identified in this study. Considerations include occult urinary tract infection, distal ureterolith, coagulopathy, benign essential hematuria, other.

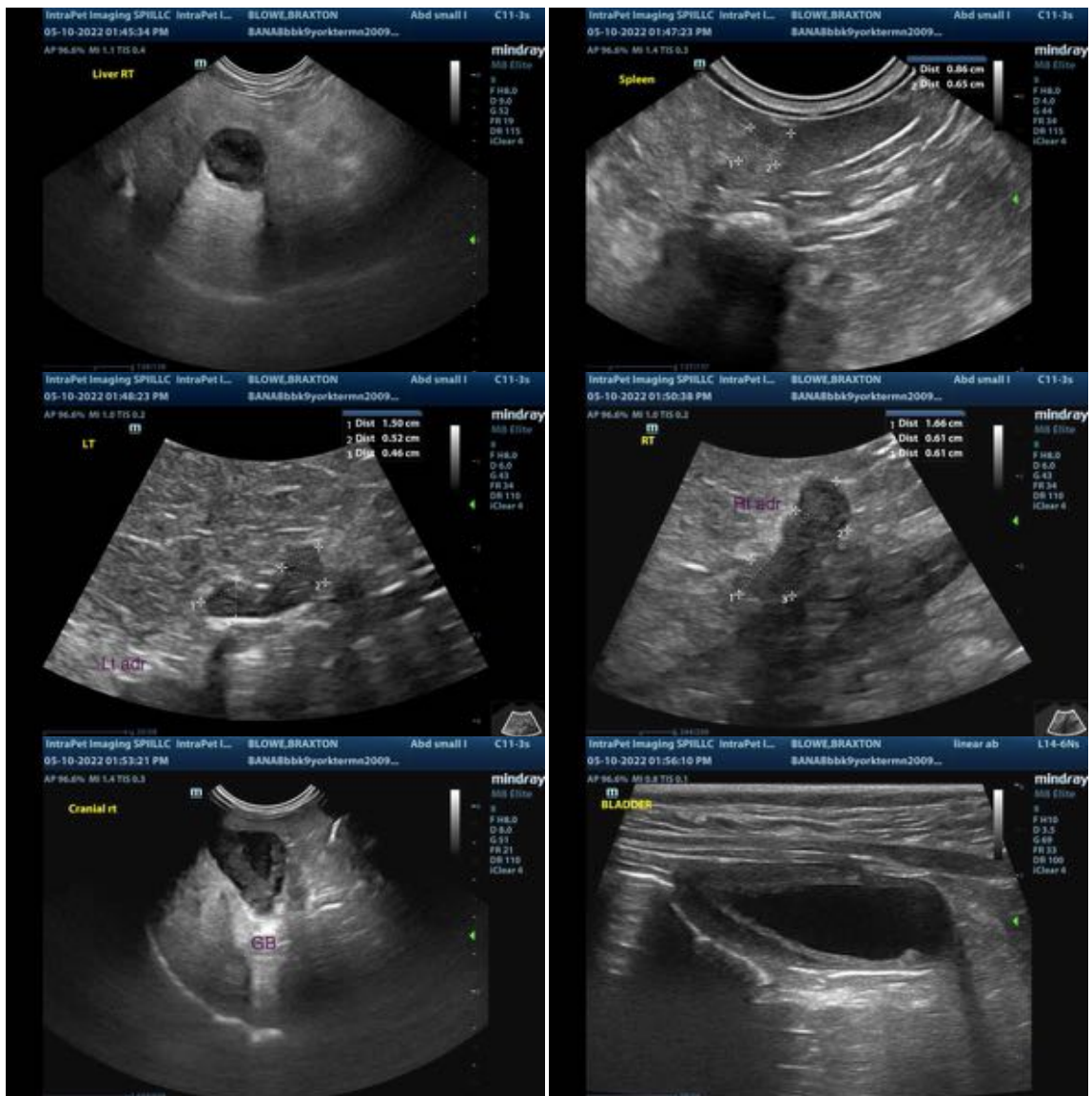
Secondary Findings:

- The gallbladder changes are concerning for a developing mucocele.
- The hepatic parenchymal changes are non-specific and may be secondary to vacuolar hepatopathy, regenerative nodular hyperplasia, age-related remodeling or some combination thereof. Inflammatory disease, infiltrative neoplasia and hepatotoxicosis are also differentials. Correlation with the patient's liver values is recommended.
- Bilateral, chronic age-related renal changes with dystrophic mineralization.
- Mild right adrenomegaly is most consistent with hyperplastic change with a lower possibility of emerging neoplasia.
- The splenic nodule is similar in size compared to the previous sonogram. It is concerning for a potentially slow growing, neoplastic process. However, a benign lesion (focus of lymphoid hyperplasia or extramedullary hematopoiesis) cannot be completely excluded.
- Age-related pancreatic remodeling.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Urine culture and sensitivity is recommended. While awaiting test results, initiation of broad-spectrum antibiotic therapy is recommended. If the urine culture is negative and the patient's hematuria persists, consider assessing clotting status (i.e., PT/PTT/platelet count). Baseline labwork including a CBC chemistry panel, urinalysis and T4 is also recommended if not already performed.
- Given the gall bladder changes, Ursodeoxycholic acid (Ursodiol) at 10-15 mg/kg once a day is recommended. Serial sonographic monitoring (e.g., every 6-8 weeks) of the gall bladder is

- recommended to assess for progression to a fully-formed mucocele.
- Regarding the splenic nodule, consider the following:
 - Thoracic radiographs to assess for pulmonary metastatic disease.
 - Fine needle aspiration of the lesion, if clotting status is appropriate.





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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