SonoPath
Clinical Sonography & Telecytology
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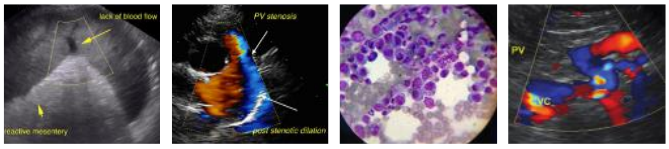

SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Rocko Wolford

SPECIES

Canine

BREED

Boston Terrier

SEX

Neutered Male

AGE

9 years

WEIGHT

28 lbs

INTERPRETED BY

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

IMAGING PERFORMED BY

Aaron Deml, DVM

HOSPITAL NAME

Craig Road AH

REFERRING VET

Cameron Johnson, DVM

INVOICE

13915

DATE

8.2.23

PRESENTING CLINICAL SIGNS

History: P is a 9yr 2mo old MN Boston Terrier presenting for suspect Cushing's Disease. P was seen recently by a mobile veterinarian where bloodwork was performed. There were increases in all of our liver enzymes, but the ALP was significantly more elevated. O also has noticed a pot-belly appearance and muscle wasting taking place on the epaxial muscles. O also notices that P is PU/PD as well. O wants P's eyes to be evaluated as well. Eating, drinking, defecating, and urinating within normal limits. No coughing, sneezing, vomiting, or diarrhea noted by owner. No known allergies to vaccines/ medication. P has no recent travel history.

Current medications: None Physical Exam: T - 102.2F rectal P - 155bpm R - Panting (~105brpm) ATTITUDE- bright, alert, responsive BW - 28.0lbs BCS - 4/9, diffuse epaxial muscle wasting, pot-belly appearance, ribs easily palpable MM - pink, moist, CRT <2 sec, adequate hydration
EENT- no nasal or ocular discharge OU; Injected sclera OU, superficial corneal defect OS, fundic exam not performed; no inflammation, erythema or discharge AU; TM not assessed AU; no other significant findings
ORAL- evidence of mild to moderate dental calculus; no masses or lesions on oral exam PLNS - peripheral LNs are normal in size and not firm or painful H/L - normal sinus rhythm, no murmurs auscultated, eupneic; no evidence of increased respiratory rate or effort, bronchovesicular sounds are normal; no crackles or wheezes auscultated
ABD - distended/pot-belly appearance, suspect large liver palpated, no obvious palpable masses UG - moderate sized bladder; no discharge or irritation; MSI - ambulatory x 4; no evidence of lameness; complete orthopedic exam not performed INT - Bilateral alopecia and erythema that is rough to the touch, non-pruritic located bilaterally on the shoulder region
NEURO - normal gait and mentation, CPs intact x 4; CNs normal; no obvious deficits; full neurologic exam not performed Pain Score (0-4) - 0.5 Rectal Exam: not performed;

Abnormal PE/Chem/CBC/UA Results: 1) Blood pressure (mmHg, #3 cuff, LF)- 181, 172, 172, 180, 170 2) Elevated ALP

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder is distended. A small amount of suspended echogenic debris is observed within the lumen. No cystic calculi are observed. The region of the trigone is normal.

The region of the prostate is not visualized due to its pelvic location.

The left kidney is normal in size (5.05 cm in length) with a normal shape and smooth peripheral contours. The cortex is hyperechoic relative to the spleen and variably thickened, with poor corticomedullary distinction. A few, small, nonobstructive foci of mineralization are visualized. Trace pyelectasia is present. A small, septated cortical cyst is seen. There is no evidence infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal in size (5.82 cm in length) with a normal shape and smooth peripheral contours. The cortex is hyperechoic relative to the spleen and variably thickened, with poor corticomedullary distinction. A few, small, nonobstructive foci of mineralization are visualized. Trace pyelectasia is present. There is no evidence infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The region of the left adrenal gland is evaluated. No obvious pathology is observed in this region.

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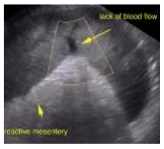
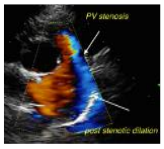
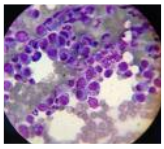
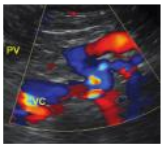

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The right adrenal gland is mildly enlarged (1.25 cm at cranial pole) (0.86 cm at caudal pole) with a slightly irregular shape. The parenchyma is subtly heterogenous with some loss of glandular detail. Surrounding vasculature appears normal.

Spleen

The spleen is normal in size (0.98 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. Pinpoint hyperechoic-to-mineralized foci are observed throughout the organ. Splenic vasculature is normal.

Liver

The liver is subjectively prominent-to-enlarged with normal curvilinear peripheral contours. The parenchyma is hyperechoic relative to the spleen and subtly heterogenous, with one-to-two small hyperechoic nodules on the left side. In addition, a 1.28 cm irregular, septated cyst is also observed on the left side. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

The gall bladder is distended. The wall is normal in thickness. A large 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 gastric lumen contains shadowing material. The gastric wall is normal to borderline thickened with retention of the normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall is normal in thickness with a normal layering pattern. The colonic wall is normal. There is no obvious evidence of an obstructive pattern.

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.

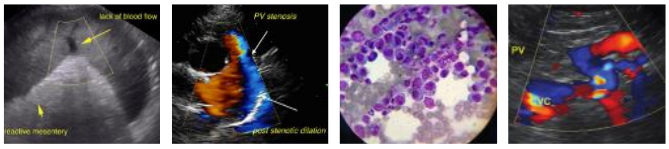
Free Abdomen

Trace free fluid is observed. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The gallbladder changes are most consistent with an emerging mucocele.
- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely. The cystic structure on the left side likely represents a benign lesion, with a lower possibility of an emerging vascular tumor.
- Mild right adrenomegaly
- Trace ascites
- The hyperechoic foci throughout the spleen likely represent dystrophic mineralization. This is a benign incidental finding, often seen with endocrinopathies.



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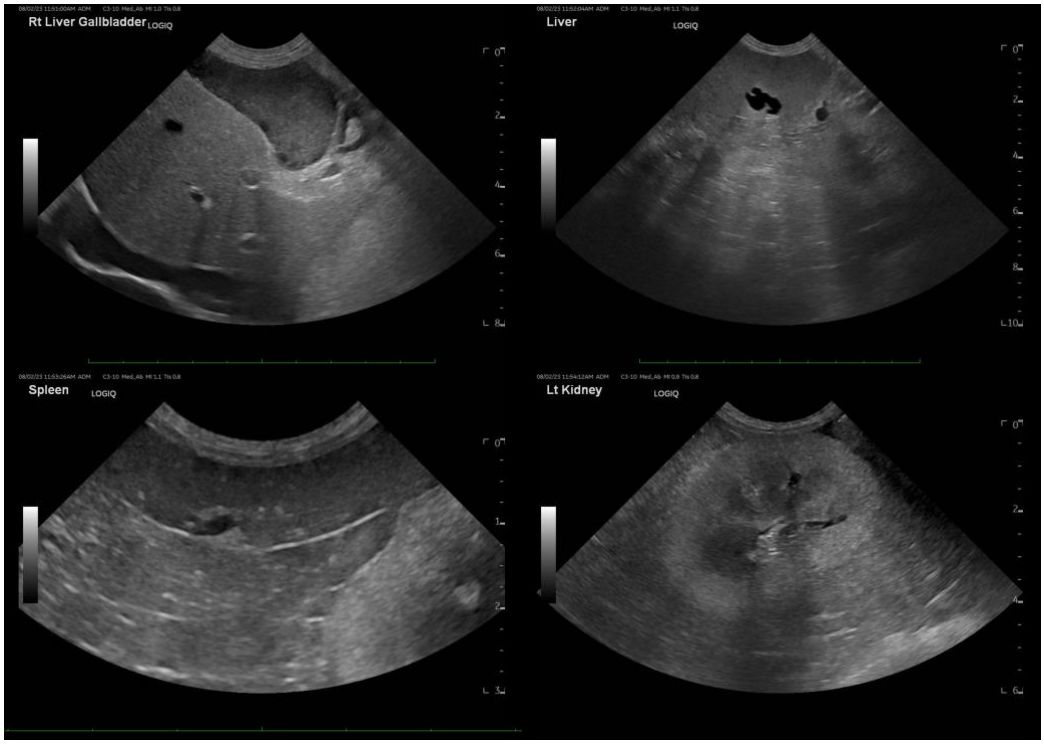
Secondary Findings

- The bilateral renal changes are most consistent with chronic interstitial nephrosis/nephritis with dystrophic mineralization.
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- The shadowing within the gastric lumen is suggestive of foreign material. It appears nonobstructive at the time of this study and is likely an incidental finding.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Additional sonographic images of the left adrenal gland would be useful to help determine if a glandular enlargement is present. Given the patient's clinical history, further testing for Cushing's disease (i.e., low-dose dexamethasone suppression test or ACTH stimulation test) should be considered. A urinalysis is also recommended to evaluate for isosthenuria.
- Repeat blood pressure measurements are recommended to evaluate for persistent hypertension. If present, anti-hypertensive medication (i.e., amlodipine) may be warranted.
- Given the gall bladder changes, Ursodeoxycholic acid (Ursodiol) 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. If progression occurs, a cholecystectomy may be warranted.



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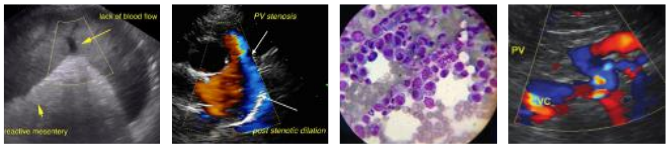

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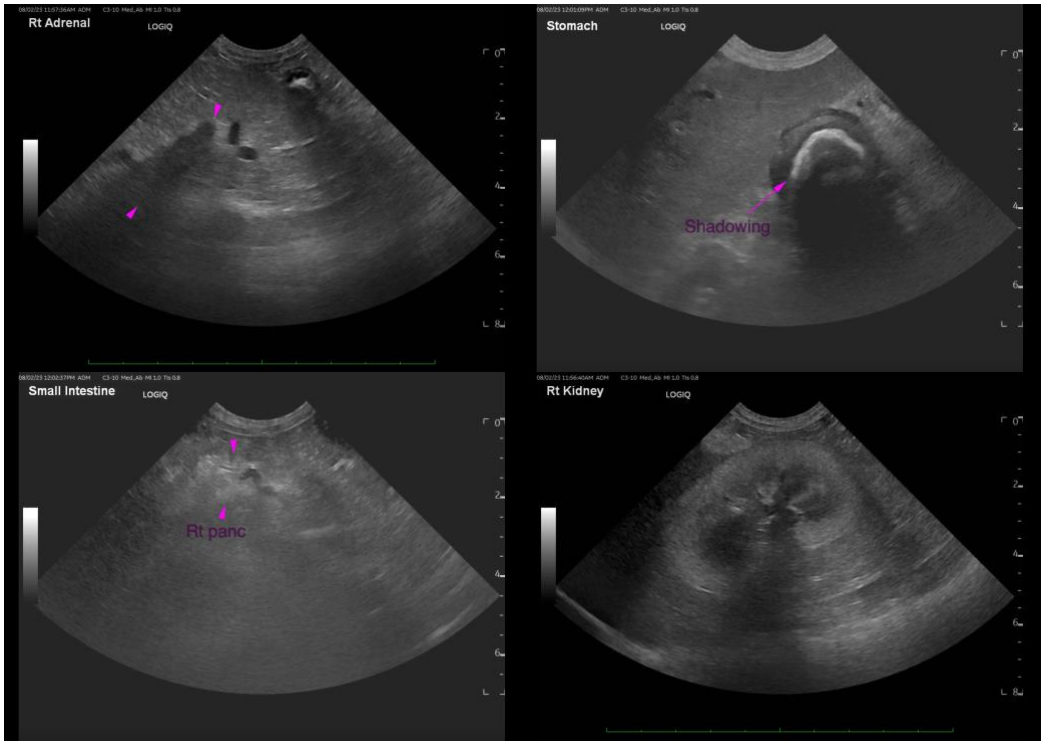

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
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