**DATE PRESENTING CLINICAL SIGNS**

1/19/2022

History: Patient presented on 12/30/21 for routine senior exam. Owner's only complaint was that pet seemed to having trouble with his hindlimbs. On PE the only abnormalities noted were otitis AS and significant muscle atrophy in the hindlimbs bilaterally. Lameness was appreciated in the right hindlimb with suspicion of a CCL injury. Bloodwork was submitted prior to sedation for radiographs. Please see bloodwork results below. Discussed possibility of emerging cholestatic disease vs. Cushing's disease with owner. Owner does report that pet drinks a lot of water and does urinate frequently at home. LDDST was questionable for Cushing's disease. Abdominal US was recommended prior to considering Trilostane treatment

**PATIENT**

Astro Williams

**SPECIES**

Canine

**BREED**

Labrador Retriever Mix

**SEX**

Male Neutered

**AGE**

9-27-2013

**WEIGHT**

109 Lbs.

**INTERPRETED BY**

Andrea Nicastro, DMV,  
Diplomate DACVIM  
(Small Animal  
Internal Medicine)

**HOSPITAL NAME**

Westminster Veterinary  
Hospital

**REFERRING VET**

Dr. Hall

**INVOICE**

10156

Current Medications: Gabapentin 300-600mg PO SID-BID PRN started 12/30/21.

Lab Results: 12/30/21: CBC: grossly benign Chem27: ALP: 216U/L (5-160); Cholesterol: 351mg/dL (131-345) Note: 4+ hemolysis was noted. TT4: 1.0ug/dL (1.0-4.0) 1/4/22: UA: SG: 1.013; pH: 6.0; Protein: 1+; epi cells: 1+. 1/13/22: LDDST: Baseline cortisol: 10.4ug/dL (1.0-6.0); 4hr-post: 0.7ug/dL; 8hr-post: 1.9ug/dL. Attached separately.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System**

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The prostate is prominent in size (1.88 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The left kidney is normal size (8.24 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. Mild pyelectasia is present (0.35 cm in the longitudinal plane). There is no evidence of nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

The right kidney is normal size (6.77 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. Mild to moderate pyelectasia is present (0.44 cm in the longitudinal plane). There is no evidence of nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

**Adrenal Glands**

The left adrenal gland is borderline enlarged (0.79 cm at cranial pole) (0.90 cm at caudal pole) (3.83 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.

The right adrenal gland is borderline enlarged (1.00 cm at cranial pole) (0.90 cm at caudal pole) (3.17 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.

### **Spleen**

The spleen is subjectively normal in size (2.38 cm in width at the level of the hilus) with normal curvilinear peripheral contours. The parenchyma is diffusely mottled in appearance with at least one ill-defined hypoechoic nodule (0.98 cm) in the medial aspect. Splenic vasculature is normal. There is no evidence of thrombosis

### **Liver**

The liver is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed.

The gall bladder lumen is moderately distended. The wall is thin and smooth. A small amount of aggregated echogenic mostly gravity dependent debris is observed within the lumen. The cystic and common bile ducts are normal.

### **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 small intestinal lumen is not dilated. The small intestinal wall thickness is normal (xxx cm) with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive or overt infiltrative disease is noted.

### **Pancreas**

The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional 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.

### **Other**

A brief echocardiogram reveals no obvious evidence of pericardial effusion.

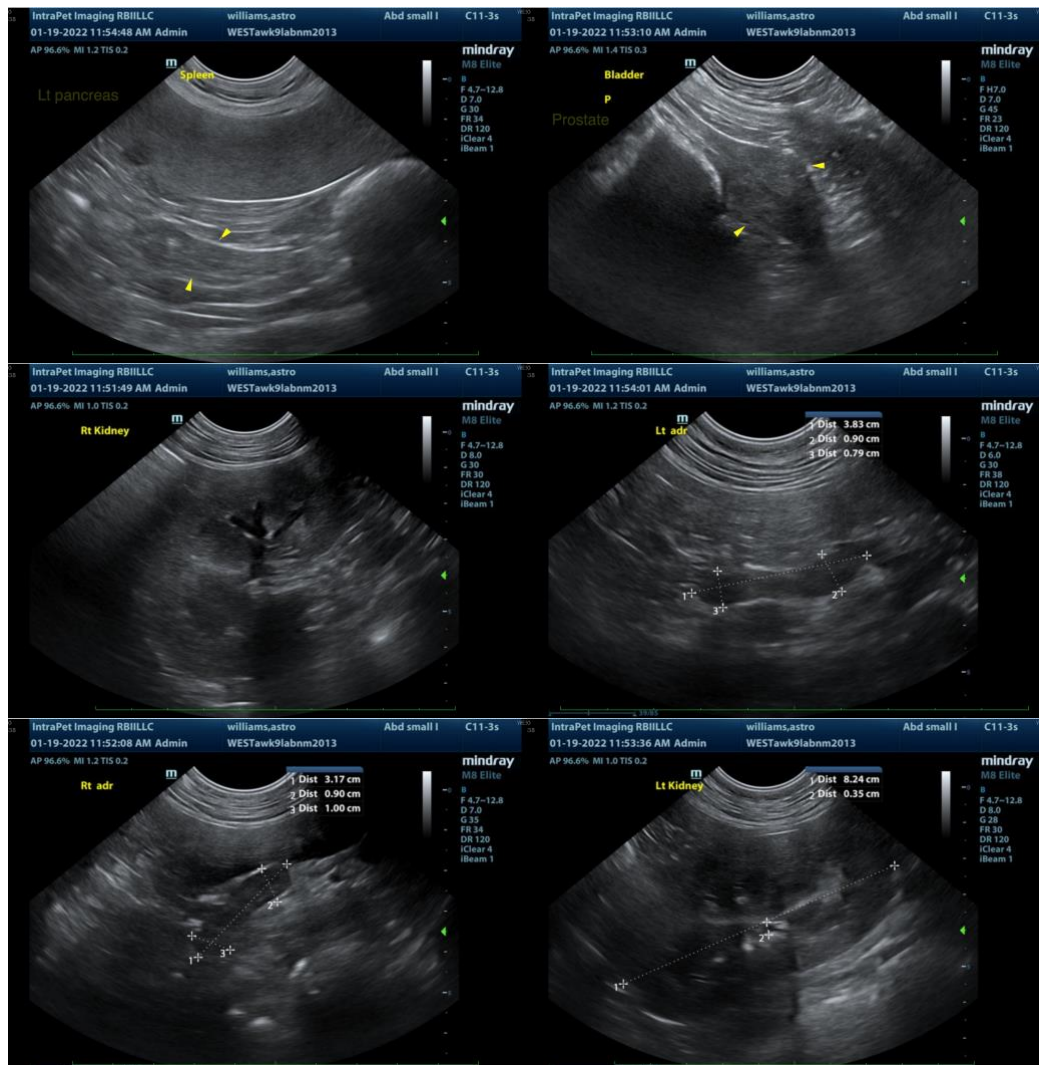
## **ULTRASONOGRAPHIC FINDINGS**

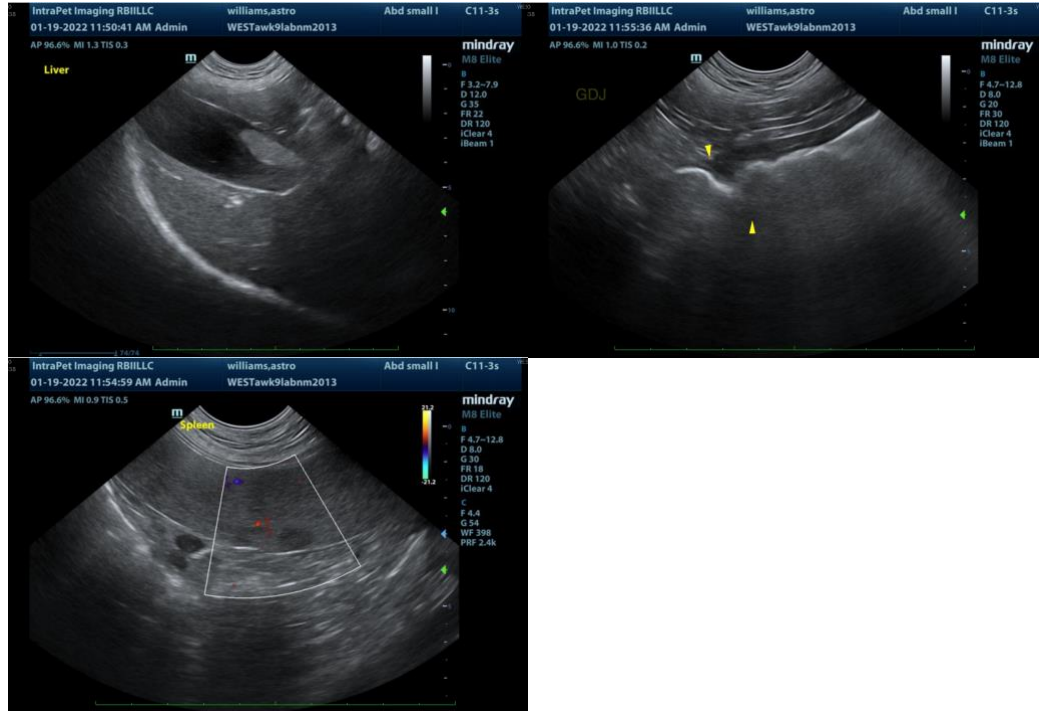
### **Primary Findings**

- Borderline bilateral adrenomegaly
- Bilateral nonspecific chronic renal changes with mild pyelectasia.
- The splenic parenchymal changes could be consistent with a benign process (i.e., lymphoid hyperplasia, extramedullary hematopoiesis, splenitis). Alternatively, emerging neoplasia (i.e., lymphoma), cannot be completely excluded.
- The mild prostatomegaly may be a normal variant for this large breed of patient. Alternatively, it could be secondary to hyperplasia due to late-in-life neutering (if applicable), or emerging neoplasia (less likely). Correlation with clinical findings is recommended.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Given the bilateral pyelectasia and the history of PU/PD, consider a urine culture and sensitivity to assess for occult pyelonephritis.
- If the patient is overtly clinical for Cushing's disease, consider initiation of medical therapy (i.e. trilostane). A UPC and baseline blood pressure measurement are also recommended.
- Given the splenic parenchymal changes, a fine-needle aspirate can be considered if clotting status is appropriate.
- Given the patient's age, three-view thoracic radiographs can be considered to assess cardiopulmonary status.





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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