


**PATIENT PRESENTING CLINICAL SIGNS**

Pluto Annable  
 History: enlarged mineralized prostate, painful abdomen  
 Abnormal PE/Chem/CBC/UA Results: Lymphocytes 0.711.05 - 5.10 x10<sup>9</sup>/L Plateletcrit 0.540.14 - 0.46 %  
 UA - blood 4+, Ketones 1+, protein 1+, Bili 1+, Leuk 1+, crystals <1

**SPECIES**

Canine

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

Chihuahua

The urinary bladder is mildly to moderately distended. The wall in the region of the urinary bladder neck, particularly at the ventral aspect, is thickened (up to 0.77 cm) and irregular. The wall in the region of the apex is normal in thickness. A moderate amount of aggregated echogenic suspended debris is observed within the lumen. No cystic calculi are seen. The proximal urethra is mildly thickened (up to 0.28 cm).

**SEX**

Male, neutered

The prostate is enlarged (3.72 x 2.86 cm) with a normal shape and smooth peripheral contours. The parenchyma is heterogeneous with foci of mineralization and a few small ill-defined cavitated areas. The prostatic urethra is not overtly dilated. Surrounding mesentery is hyperechoic. A small amount of retroperitoneal fluid is visualized.

**AGE**

10 Yrs.

The left kidney is normal in size (4.52 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

**WEIGHT**

4.3 kg.

The right kidney is normal in size (4.70 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

**INTERPRETED BY**

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

***Adrenal Glands***

The left adrenal gland is mildly enlarged (0.76 cm at cranial pole) (0.73 cm at caudal pole) (1.82 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.

**IMAGING PERFORMED BY**

Kelly Reshny, RVT

The right adrenal gland is mildly enlarged (1.03 cm at cranial pole) (0.61 cm at caudal pole) (1.71 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**
***Spleen***

Beattie PH Stoney Creek

The spleen is normal in size (1.02 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

**REFERRING VET**
***Liver***

Dr. MacDonald

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen with minor changes consistent with age-related remodeling. No focal lesions are observed. Hepatic vasculature and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is thin and smooth. Luminal contents are anechoic. The cystic and common bile ducts are normal/not seen.

**INVOICE**

12055

**DATE**

9/9/21



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***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 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***

Trace free fluid is observed in the caudal abdomen. The abdominal lymph nodes are normal/not visible.

**ULTRASONOGRAPHIC FINDINGS**

**Primary Findings:**

- Prostatic mass effect with suspected infiltration of the proximal urethra and urinary bladder neck. Neoplasia (i.e., prostatic adenocarcinoma, transitional cell carcinoma) is considered likely with a low possibility of a benign pathology. Caudal retroperitonitis, likely secondary to prostatic and urinary bladder pathology.

**Secondary Findings:**

- Age-related renal and hepatic changes.
- Mild bilateral adrenomegaly.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

- Three-view thoracic radiographs are recommended to assess for pulmonary metastases.
- A urine BRAF test is recommended to confirm a lower urinary tract neoplasia. If results are inconclusive, consider traumatic urethral catheterization with submission of the cells for cytology or surgical prostatic biopsy to get a definitive diagnosis.



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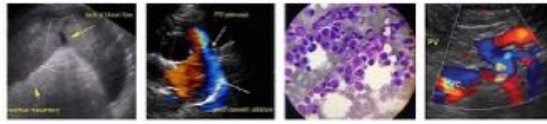
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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