**DATE PRESENTING CLINICAL SIGNS**

1/19/2022 History: Blood present in urine.

**PATIENT**

Dutchess Pugh

Current Medications: Amoxicillin 500mg, 1 capsule every 8 hours. Ciprofloxacin 500mg, 1 tablet every 12 hours. SMZ 480mg, 1 tablet every 12 hours.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Not required to complete full diagnostic ultrasound.

**SPECIES**

Canine

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

**BREED**

Pitbull Terrier

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

The bladder wall and the dorsal apical and ventral apical region is severely thickened (up to 2.52 cm dorsally, up to 1.09 cm ventrally), with a mass effect. The mass almost completely fills the bladder lumen and comes within 2 cm or less of the trigone. The mass in the ventral wall is somewhat vascular. In the visible portion of lumen, there is no evidence of cystic calculi. The visible portion of the proximal urethra is normal

**AGE**

8-13-2010

The left kidney is normal size (7.02 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**WEIGHT**

81 Lbs.

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 minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

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

**Adrenal Glands**

The left adrenal gland is normal size (0.67 cm at cranial pole) (0.70 cm at caudal pole) (3.36 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**

Advanced Veterinary  
Complex

The right adrenal gland is normal size (0.70 cm at cranial pole) (0.80 cm at caudal pole) (2.74 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 (1.56 cm in width at the level of the hilus) with normal peripheral margins and a curled contour. The parenchyma is of appropriate echogenicity with a coarse echotexture and is slightly mottled in appearance. No distinct focal lesions are observed. Splenic vasculature is normal with no evidence of thrombosis.

**REFERRING VET**

Dr. Benson

**INVOICE**

10157

**Liver**

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.

### ***Gastrointestinal***

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is mildly distended with gas and a small amount of fluid. 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 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. A 2.11 x 1.02 cm lymph node is observed at the aortic trifurcation.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

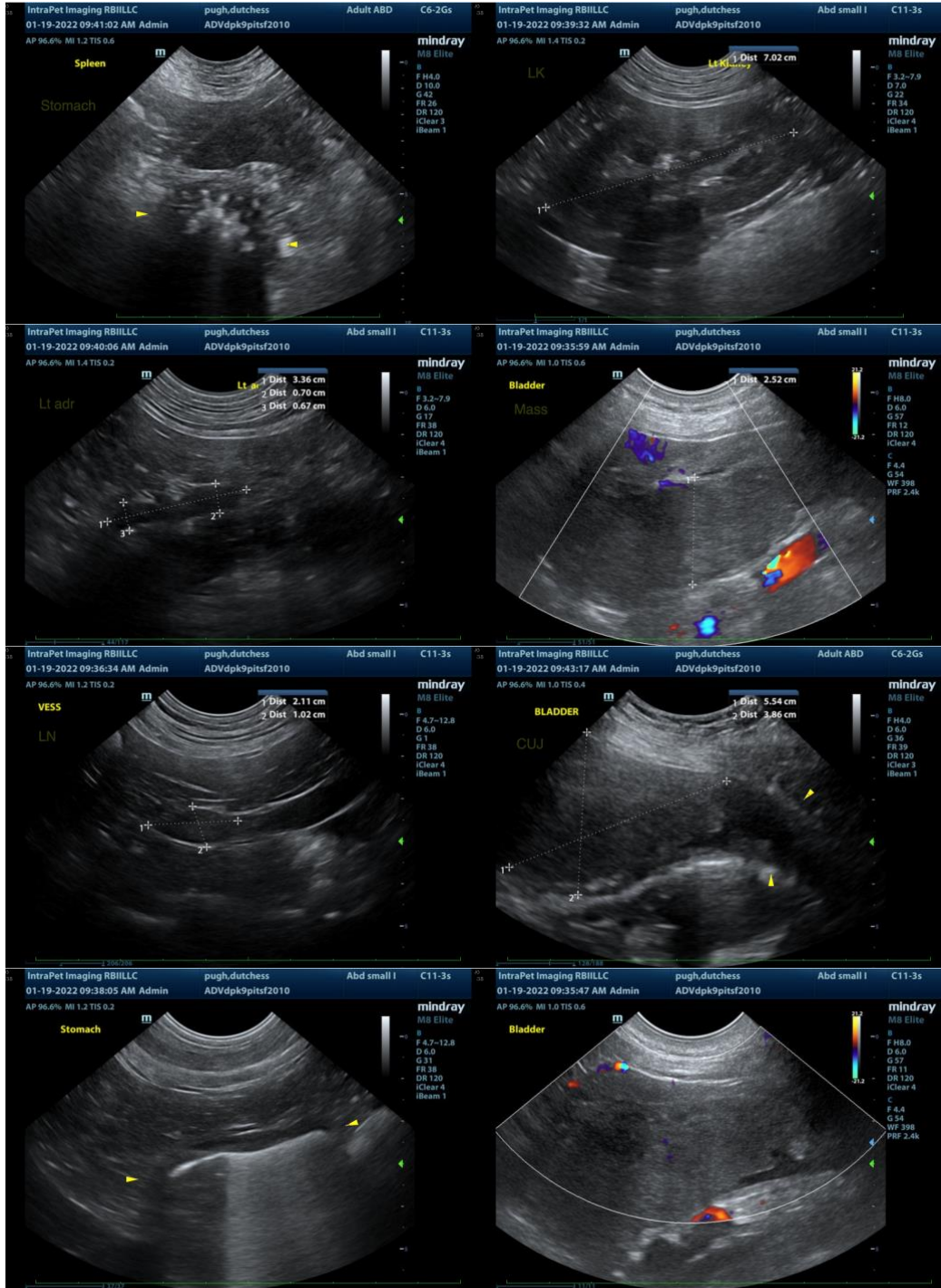
- Apical urinary bladder mass with extension distally. Neoplasia (i.e., transitional cell carcinoma), is considered likely.
- The prominent lymph node at the aortic trifurcation may represent reactive change or metastatic neoplasia (from the bladder tumor).

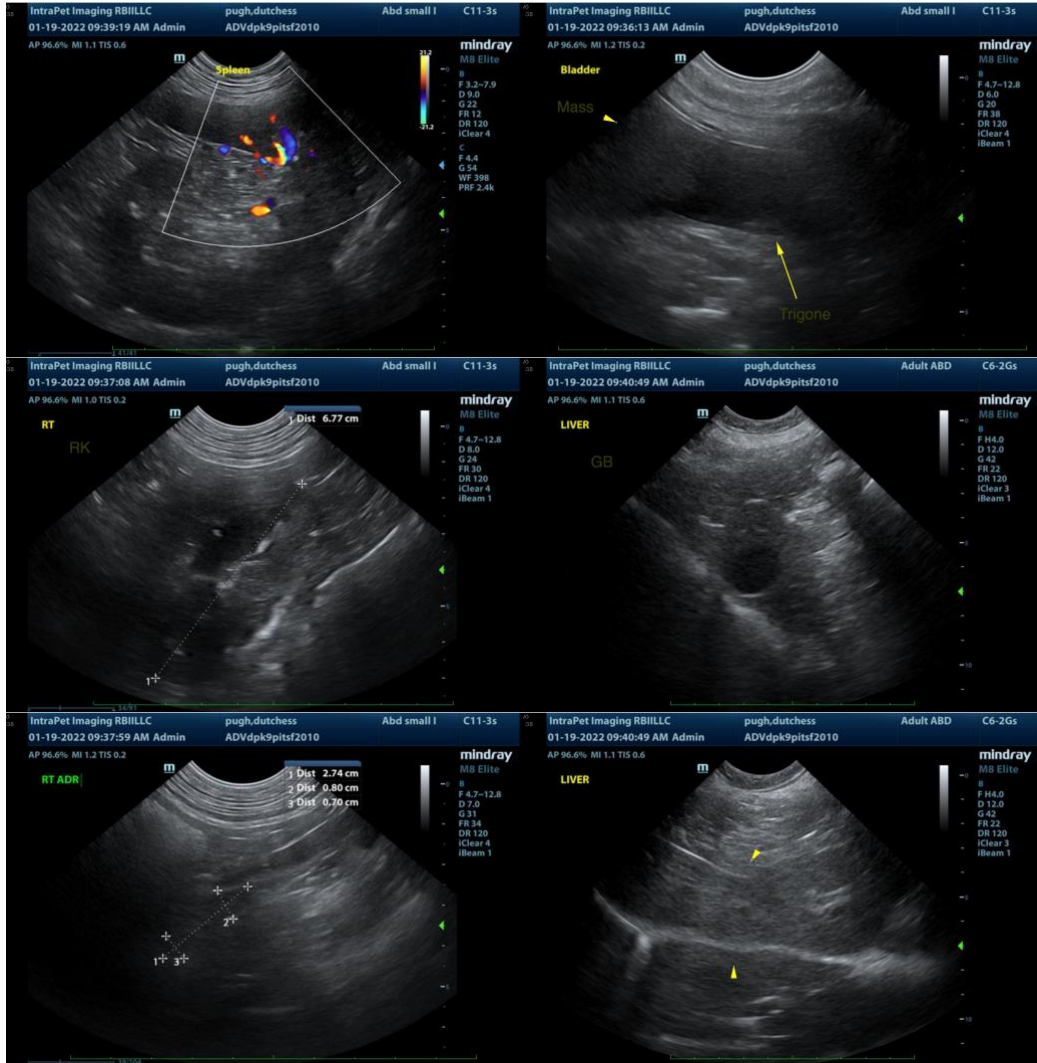
### **Primary Findings**

- Minor geriatric hepatic and renal changes
- The splenic parenchymal changes trend toward the benign (i.e., lymphoid hyperplasia or extramedullary hematopoiesis), with a lower possibility of emerging neoplasia.

## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

- Three-view thoracic radiographs are recommended to assess for pulmonary metastases.
- A urine BRAF test is recommended to further assess for transitional cell carcinoma.
- If neoplasia is confirmed and an aggressive approach is desired, referral to a board-certified oncologist is recommended to discuss chemotherapy.
- If palliative care for the bladder mass is desired, consider the following regimen:
  1. Piroxicam at 0.3 mg/kg PO every 24 hours (may need to be compounded in smaller patients)
  2. Misoprostol (stomach protectant) at 2 mcg/kg PO every 12 hours
  3. Baseline renal values should be performed then repeated every 4 weeks to monitor for nephrotoxicity





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.

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