**DATE PRESENTING CLINICAL SIGNS**

12/17/21 History: Chronic UTI, poor response to antibiotics (cultures sensitive to ciprofloxacin, but not improving after 2 weeks).

**PATIENT** Lab Results: Currently has E. coli UTI, resistant to many antibiotics.

Pax Rouse Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Canine

**Urinary System**

**BREED**

The urinary bladder is distended. The wall overall, is normal in thickness with a smooth mucosal surface. No cystic calculi are observed. The trigone is prominent with a smooth mucosal surface. The visible portion of the proximal urethra is normal.

Labrador Retriever

**SEX**

The left kidney is normal in size (5.82 cm in length); with an irregular shape. The cortex is variably thickened and slightly heterogenous in appearance with moderate loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. Moderate pyelectasia is present (0.42 cm in the transverse plane) There is no evidence of hydroureter.

Spayed Female

**AGE**

The right kidney is normal size (5.84 cm in length); with an irregular shape. The cortex is variably thickened and there is moderate loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. Mild pyelectasia is present (0.29 cm in the transverse plane) There is no evidence of hydroureter.

8/8/08

**WEIGHT**

**Adrenal Glands**

95 Lbs.

The left adrenal gland is normal size (0.90 cm at cranial pole) (0.75 cm at caudal pole) (2.71 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.

**INTERPRETED BY**

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

The right adrenal gland is normal size (0.96 cm at cranial pole) (0.64 cm at caudal pole) (2.46 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**

Andi Parkinson RDMS

**Spleen**

The spleen is normal in size (1.38 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.

**HOSPITAL NAME**

Timonium AH

**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.

**REFERRING VET**

Dr. Stephens

The gall bladder lumen is moderately distended. The wall is thin and smooth. Luminal contents are mostly anechoic. The cystic and common bile ducts are normal.

**INVOICE**

10058

**Gastrointestinal**

The gastric lumen is distended with ingesta. 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. There is slight disruption in the normal 1:3 muscularis to mucosal ratio in most segments. Discrete masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

#### ***Pancreas***

A portion of the pancreas is somewhat obscured by the gastric distention. In the visualized portions, no obvious pathology is seen.

#### ***Free Abdomen***

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. A 2.02 cm sub lumbar is visualized. The abdominal lymph nodes are normal/not visible.

### **ULTRASONOGRAPHIC FINDINGS**

#### **Primary Findings**

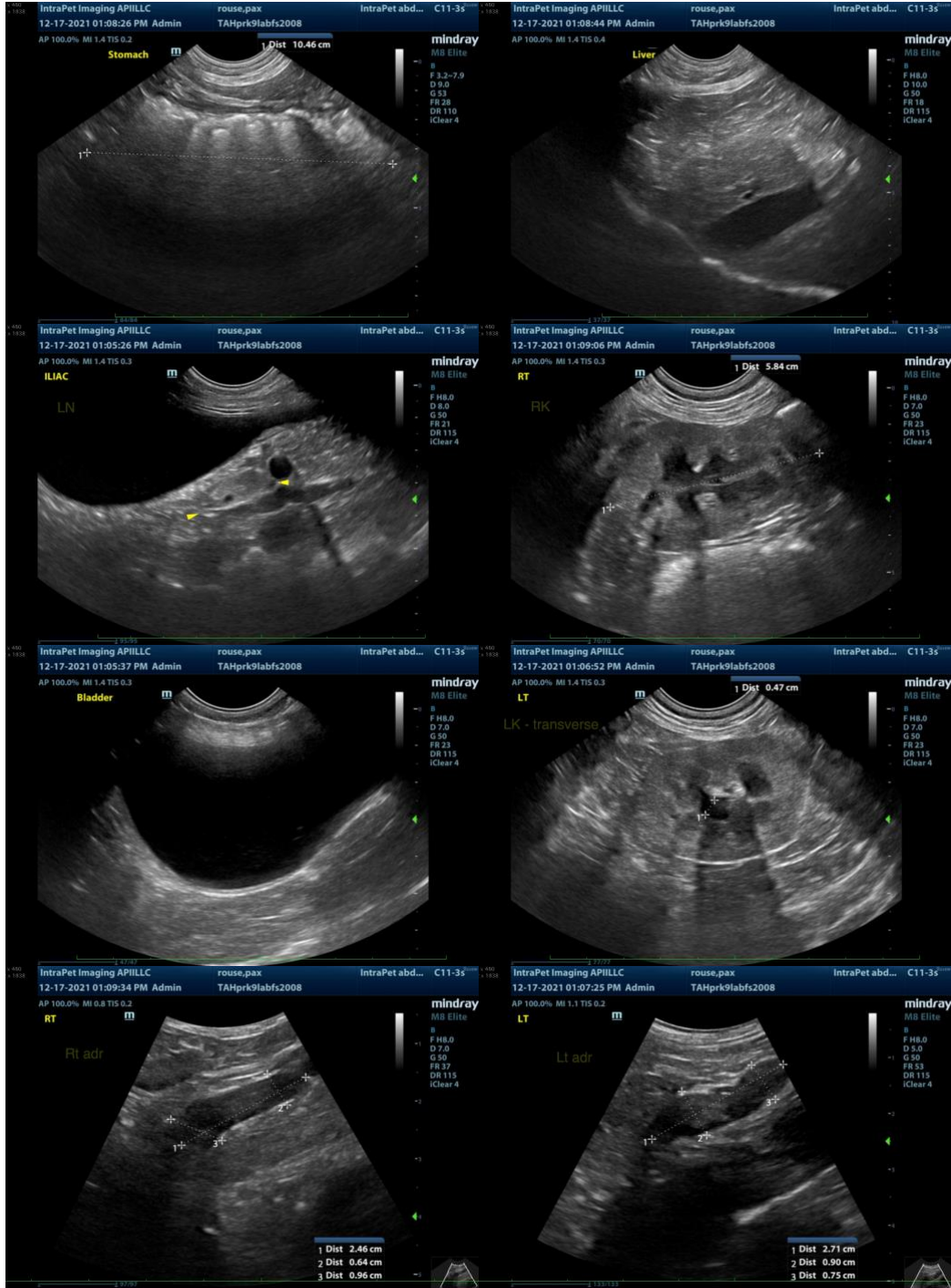
- Subjectively prominent trigone region (very slight). This may be a normal variant for this patient, or be secondary to inflammation or less likely, emerging neoplasia.
- Bilateral nephropathy with pyelectasia and dystrophic mineralization
- The sublumbar lymphadenopathy is suspected to be reactive, with lower potential for infiltrative neoplasia.

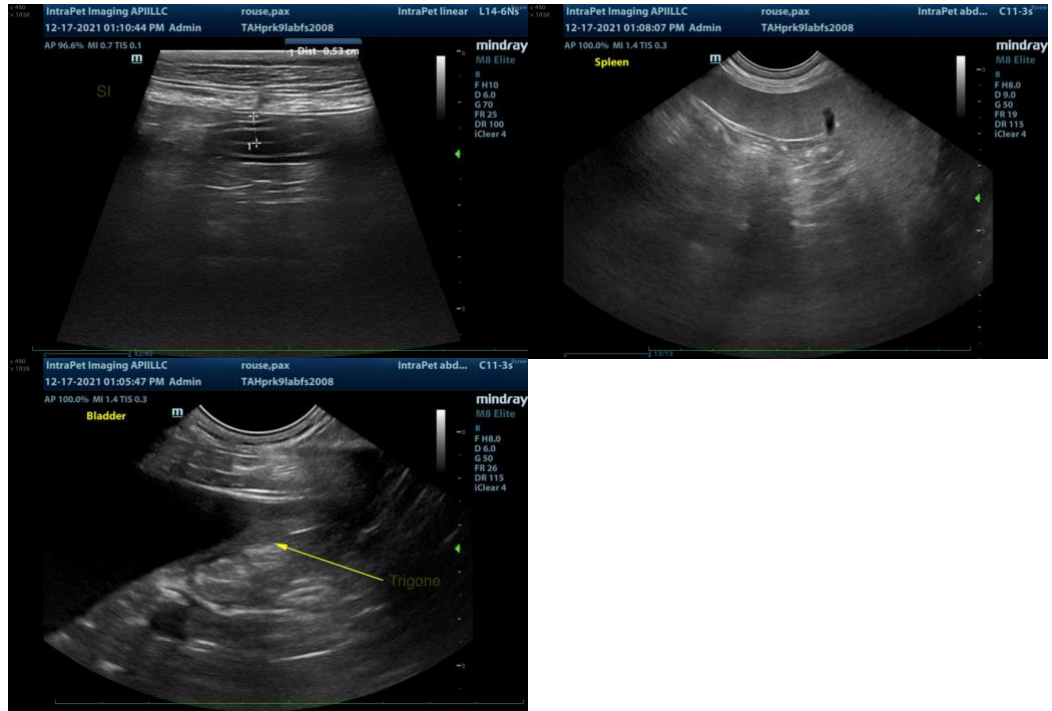
#### **Secondary Findings**

- The hepatic changes are consistent with age-related parenchymal remodeling and are not considered clinically significant at this time.
- Bowel pattern consistent with inflammatory bowel disease with lower potential for emerging lymphoma

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

- Consider a urine culture and sensitivity with an extended sensitivity spectrum (i.e., to include meropenem). Also consider a urine BRAF test to screen for microscopic lower urinary tract neoplasia.
- Given the bilateral renal changes, a prolonged antibiotic course (i.e., 3-4 weeks) may be necessary to treat for pyelonephritis.
- Baseline lab work including a CBC chemistry panel and T4 is also recommended, if not already performed.
- Given the patient's age, three-view thoracic radiographs are also recommended.





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)**  
info@SonoPath.com