

**DATE**

9/3/21

PRESENTING CLINICAL SIGNS

History: Urinary accidents and incontinence, minimal improvement with antibiotic but significant improvement on Proin.

PATIENT

Theo Owens

Current Medications: Proin 25mg PO BID started on 8/26
 Cefpodoxime 100mg 1 PO SID for 14 days started on 5/14/21.

Lab Results: Labs not provided by the veterinarian.

Radiographs Dorsal bladder wall thickened and irregular with one finger-like projection on in-house scan.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

SPECIES

Canine

Sedation: Butorphanol 0.25mL and Dexdomitor 0.05mL IV administered prior to scan.

Stat Report: STAT report not requested by the veterinarian.

BREED

Beagle

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder is moderately distended. The wall in the region of left urinary bladder neck/trigone area is thickened (up to 0.90 cm) and irregular extending approximately 1 cm into the left distal ureter. The left ureter is thickened (up to 0.52 cm). A small amount of suspended echogenic debris is observed within the lumen. No cystic calculi are observed. The proximal urethra is subjectively mildly thickened (0.45 cm).

SEX

Male, neutered

The prostate is normal to prominent in size (1.32 cm in width) with a normal shape and smooth peripheral contours. The parenchyma is mostly homogeneous. A 0.15 cm hypoechoic area is present within the gland. The prostatic urethra is not overtly dilated.

AGE

3/20/09.

WEIGHT

30 lbs.

The left kidney is normal size (5.63 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (6.02 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

INTERPRETED BY

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

Adrenal Glands

The left adrenal gland is normal size (0.59 cm at cranial pole) (0.57 cm at caudal pole) (1.86 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

Timonium AH

The right adrenal gland is normal size (0.60 cm at cranial pole) (0.75 cm at caudal pole) (1.87 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.

REFERRING VET

Dr. Stephens

Spleen

The spleen is normal in size (0.97 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.

INVOICE

12017

Liver

The liver is subjectively enlarged with slightly swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely homogeneous in appearance. No distinct focal lesions are observed. Vascular 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. A small amount of aggregated echogenic partially dependent debris is observed within the lumen. The cystic and common bile ducts are normal/not seen. The gall bladder lumen is distended. The wall is normal in thickness. A moderate amount of echogenic debris is observed within the lumen, some of which is adhering to the wall and some of which is suspended. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The gastric lumen is moderately distended with gas and a small amount of ingesta as well as a 1.44 cm irregular soft shadowing material. 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

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

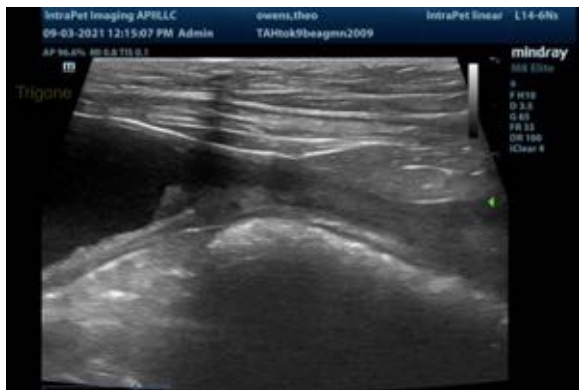
- The urinary bladder/left distal ureteral changes with possible extension into the proximal urethra are most concerning for infiltrative neoplasia (i.e., transitional cell carcinoma) with a lower possibility of an inflammatory process. Urinary bladder debris.

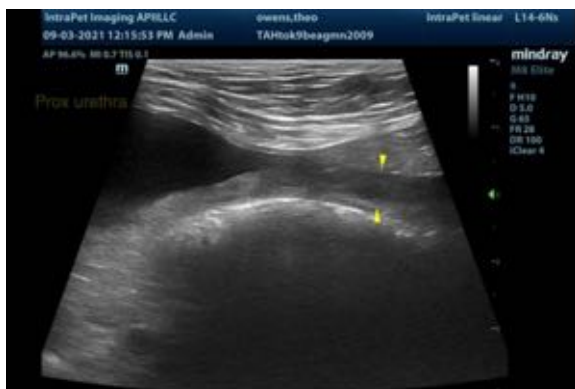
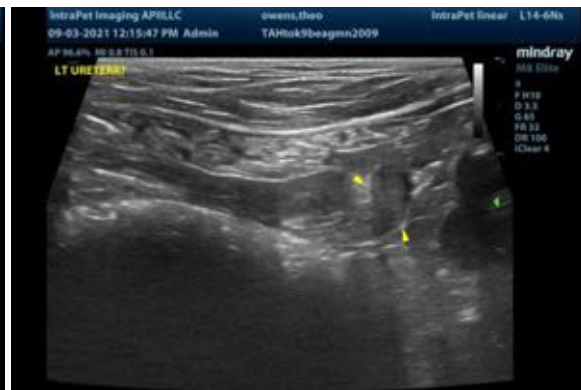
Secondary Findings:

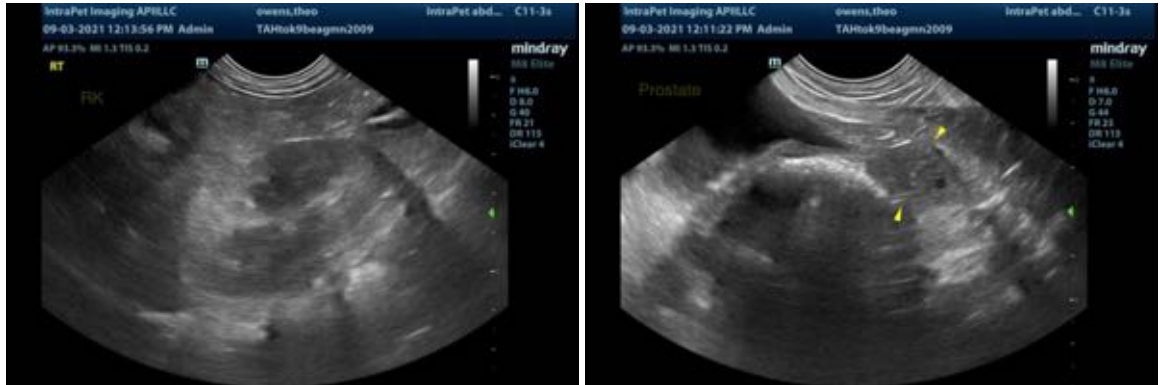
- Bilateral age-related renal changes.
- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely.
- The shadowing material in the gastric lumen may represent ingesta and/or foreign material.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Consider a urine BRAF test to further evaluate for lower urinary tract neoplasia.
- Three-view thoracic radiographs are recommended to assess for pulmonary metastatic disease.
- Depending on the above results, referral to a board-certified veterinary oncologist could be considered to discuss chemotherapy options, if desired.







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 ACVIM (*Small Animal Internal Medicine*)
Andrea.nicastro@sonopath.com