

**DATE PRESENTING CLINICAL SIGNS**

8.4.23

History: Recently adopted pet from shelter with hx of polydipsia. PE: skin turgor poor. Bilateral mature cataracts with probable blindness. Grade 2/6 systolic murmur on the R, regular rhythm, pulses full. Fullness in the caudal abdomen. Scrotum empty. Neutered 5/26/23 at shelter. Prostate not palpable. Recent episode of hematuria with possible rod bacteriuria at ER. Tx with Enrofloxacin 06/13/23. On 6/26/23 hematuria continues with possible clumps of metaplastic renal cells - no bacteria seen. ALT 175 (10-125), ALK 319 (23-212), WBC 26.7, neut 22.3, monocytes 2.0, USG 1.025 pH 6.5 URBC 21, UWBC 2. Other urine, hematology, chemistry normal

PATIENT

Niko Rosinsky

SPECIES

Canine

BREED

WH White Terrier

SEX

Neutered Male

AGE

5/15/2010

WEIGHT

13.9 lbs

INTERPRETED BY

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

HOSPITAL NAME

Friendly Paws VC

REFERRING VET

Dr. Price

INVOICE

13945

Pertinent abnormal PE/Chem/CBC/UA Results: ALT 175 (10-125), ALK 319 (23-212), WBC 26.7, neut 22.3, monocytes 2.0, USG 1.025 pH 6.5 URBC 21, UWBC 2. Other urine, hematology, chemistry normal
Current medications: Fluoxetine 10mg 1/2 pill SID, Carprofen 25mg Tablets 1/2 tablet BID, Enrooxacin 68mg Tablets 1 tablet SID

Sedation used: Patient sedated with Torbugesic.

Pertinent previous ultrasound results: No previous.

STAT: Not requested

Imaging performed by: Andi Parkinson, BS, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder wall is normal in thickness. The mucosal surface in the region of the apex is slightly irregular. bladder is mildly distended. Luminal contents are anechoic. No cystic calculi are observed. The region of the trigone is normal. The proximal urethra is mildly dilated (up to 0.56 cm). There is no obvious evidence of obstruction in the visible window.

The prostate is normal in size (2.28 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The left kidney is normal in size (4.00 cm in length) with a slightly irregular shape. 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, or hydroureter.

The right kidney is normal in size (4.12 cm in length) with a normal shape, architecture and 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.

Adrenal Glands

The caudal pole of the left adrenal gland is well-visualized and is upper limits of normal size (0.53 cm in width) with a normal shape, glandular echogenicity and detail. Surrounding vasculature appears normal.

The right adrenal gland is in normal size (0.71 cm at cranial pole) (0.48 cm at caudal pole) (1.69 cm in length) with a normal shape and 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 normal in size (1.00 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.

Liver

The liver is subjectively enlarged with swollen peripheral contours. The parenchyma is isoechoic relative to the spleen. At the caudal aspect of the left- to mid-liver, a 2.43 x 0.93 cm ill-defined lesion (isoechoic to the hepatic parenchyma) is visualized. It is unclear whether this lesion is arising from the hepatic parenchyma or adhered to it. In the remainder of the liver, the parenchyma is homogenous. Hepatic vasculature and intrahepatic 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, gravity-dependent debris/sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

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 is normal in thickness with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The wall of the descending colon is mildly thickened (up to 0.46 cm) with retention of the normal layering pattern. There is no evidence of an obstructive pattern.

Pancreas

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

Free Abdomen

The mesentery throughout the abdomen is hyperechoic and slightly irregular. A moderate amount of echogenic free fluid is present. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

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Primary Findings

- Moderate ascites. Differentials include increased hydrostatic pressure (i.e., secondary to right-sided congestive heart failure), low oncotic pressure, or increased vascular permeability (i.e., vasculitis).
- The lesion at the caudal aspect of the left mid-liver may represent an adhered blood clot, emerging tumor, inflammatory focus, other. The diffuse hepatic parenchymal changes are nonspecific and are most consistent with a benign hepatopathy (i.e., vacuolar) with a lower possibility of inflammatory disease, infiltrative neoplasia, or other hepatopathy.

Secondary Findings

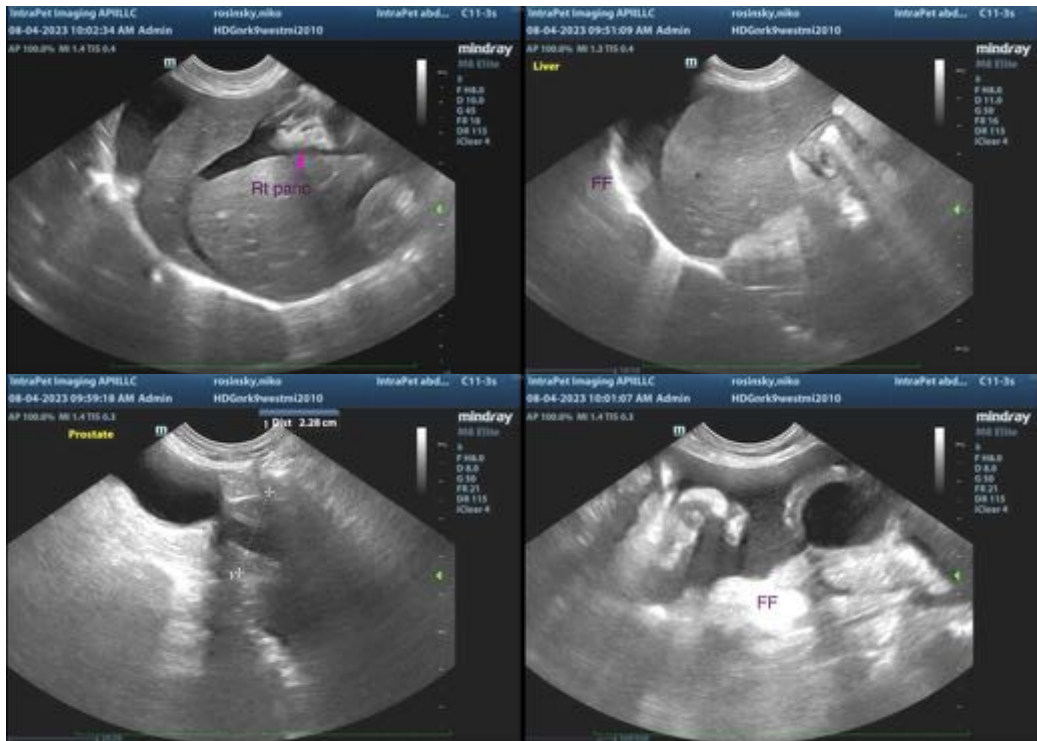
- Mild, bilateral chronic renal changes
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

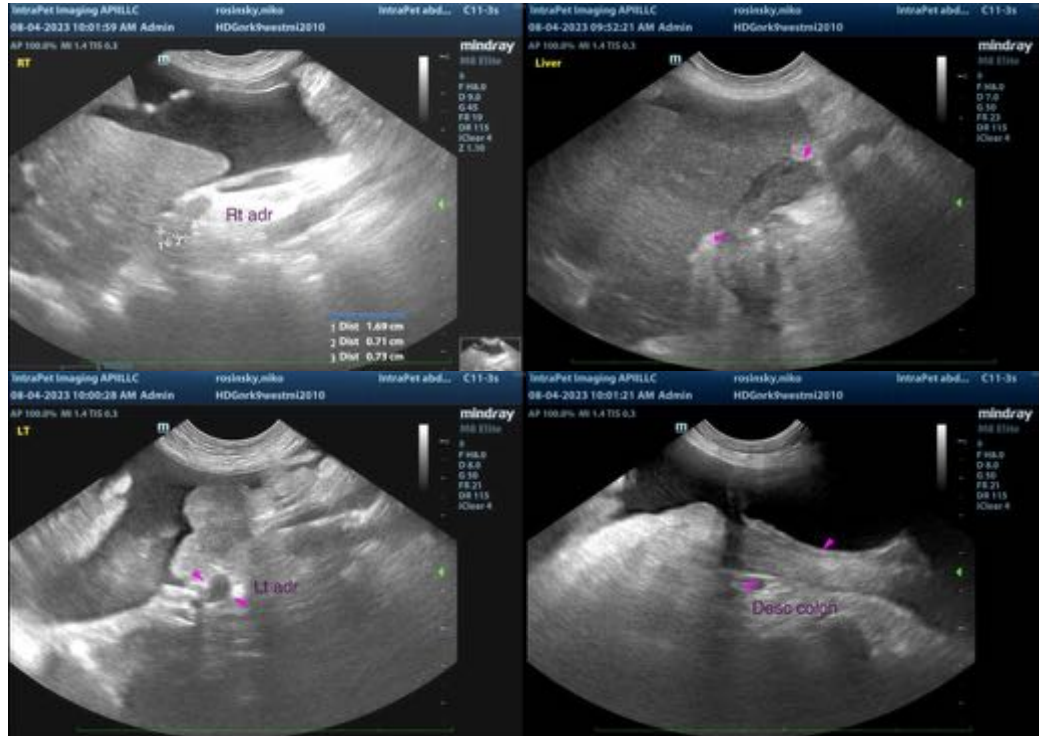
- The mild thickening of the descending colonic wall is most consistent with inflammation, with a lower possibility of emerging neoplasia.
- The prostate changes are most consistent with benign prostatic hyperplasia. Bacterial prostatitis is also a differential but considered unlikely in the absence of lower urinary tract signs.

*An obvious cause for the patient's hematuria is not definitively identified in this study. Considerations include occult urinary tract infection, distal urethral neoplasia or stones, benign essential renal hematuria, coagulopathy, other.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Three-view thoracic radiographs are recommended (if not already performed).
- Given the hematuria, consider a urine culture and sensitivity +/- a BRAF test (to further evaluate for lower urinary tract neoplasia).
- Depending on the results of the above diagnostics as well as the echocardiogram report, further work-up may be warranted.





The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. 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, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com