

**DATE PRESENTING CLINICAL SIGNS**

7/31/23

PATIENT

Rusty Gonzalez

History: Patient presented 7/17/23 for urinating blood (dark red) and straining. Based on my fast scan ultrasound concerned about mineralization caudal to the trigone and enlarged prostate. The radiograph looks like possible mineralization in the prostate as well. Treating the p for possible prostatitis, but concerned about mass in the urinary system as well. No real improvement with the medications listed below.

SPECIES

Canine

Current Medications: started on 7/17: Rimadyl 25mg BID, Tramadol 50mg BID, Prazosin 1mg SID, Enrofloxacin 68mg SID

Lab Results: See attached.

BREED

Cocker Spaniel

Radiographs: See attached report.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

SEX

Neutered Male

Imaging Performed By: Rachel Brillhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**AGE**

7/8/15

Urinary System

From the prostate into the trigone of the urinary bladder, there is an overall approximately 3.0 cm x 5.5 cm amorphous mineralized vascular mass with poor differentiation from surrounding tissue. The remainder of the urinary bladder wall appears more normal in appearance and the lumen of the urinary bladder contains primarily anechoic contents with a large amount of echogenic, and some mineral/sand, both dependent and suspended debris.

WEIGHT

25.4 Pounds

Left kidney is normal is size (5.46 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

INTERPRETED BYBeth Johnson, DVM
DACVIM

Right kidney is normal is size (5.62 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

HOSPITAL NAME

Northwind AH

Adrenal Glands

Adrenal glands are plump/swollen in size. Normal shape and contour are maintained without evidence of capsular invasion. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. Left adrenal gland measures 0.72 cm at cranial pole and 0.86 cm at caudal pole. Right adrenal gland measures 0.93 cm at cranial pole and 1.0 cm at caudal pole.

REFERRING VET

Dr. Jones

Spleen

Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

INVOICE

23733

Liver

Liver is subjectively enlarged with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of peritoneal effusion. The sublumbar lymph nodes are enlarged with swollen irregular capsular contour and loss of normal length to width ratio (rounded in shape). Nodes are hypoechoic with loss of normal parenchymal detail. The enlarged sublumbar lymph node measures 1.1 cm x 1.2 cm in size.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Prostate/urinary bladder mass – These changes are most concerning for infiltrative neoplasia, involving the prostate, as well as the trigone of the urinary bladder, such as transitional cell carcinoma vs other. Benign inflammatory disease (cystitis) cannot be ruled out but is considered less likely given the location and appearance of the tissue.
- Aggressive sublumbar lymph nodes – most consistent with infiltrative round cell or metastatic neoplasia. A benign aggressive inflammatory response cannot be ruled out without tissue sampling +/- culture.

Secondary Findings

- Bilateral adrenomegaly – consistent with adrenal hyperplasia secondary to pituitary dependent hyperadrenocorticism vs stress or normal variant. Interpret in combination with clinical signs of hyperadrenocorticism.
- Heterogenous Liver – These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia.
- Mild gallbladder debris - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in

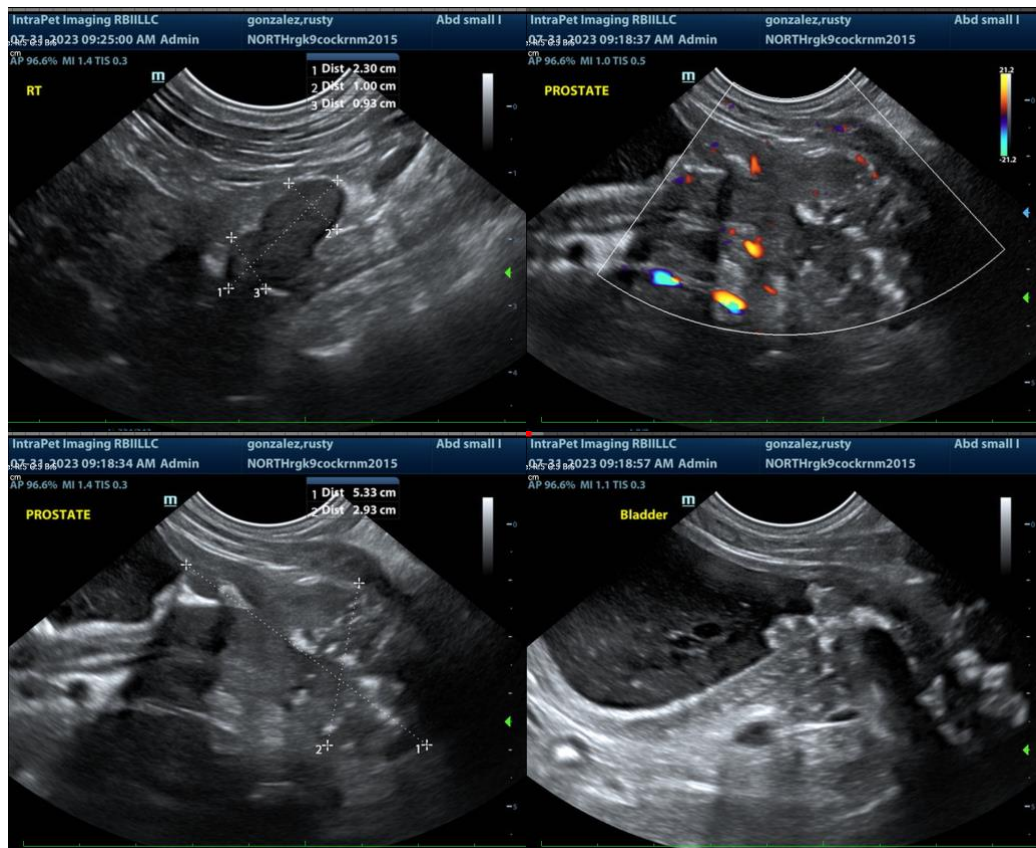
combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

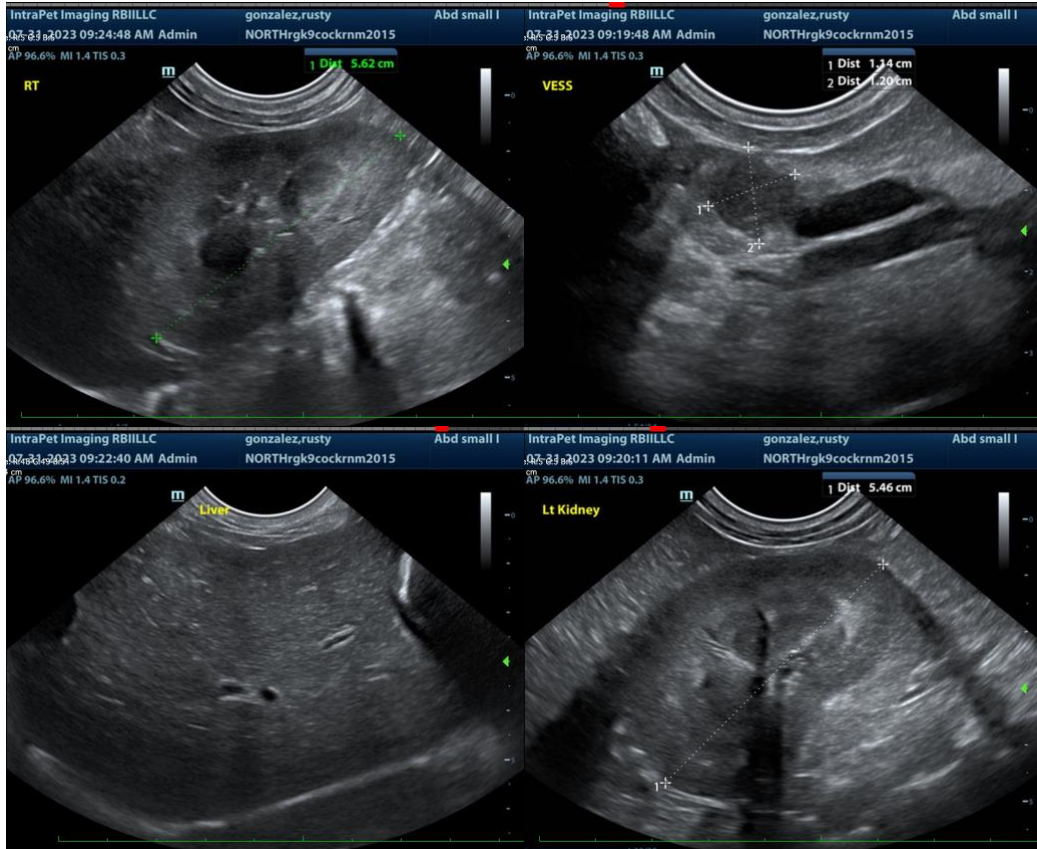
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

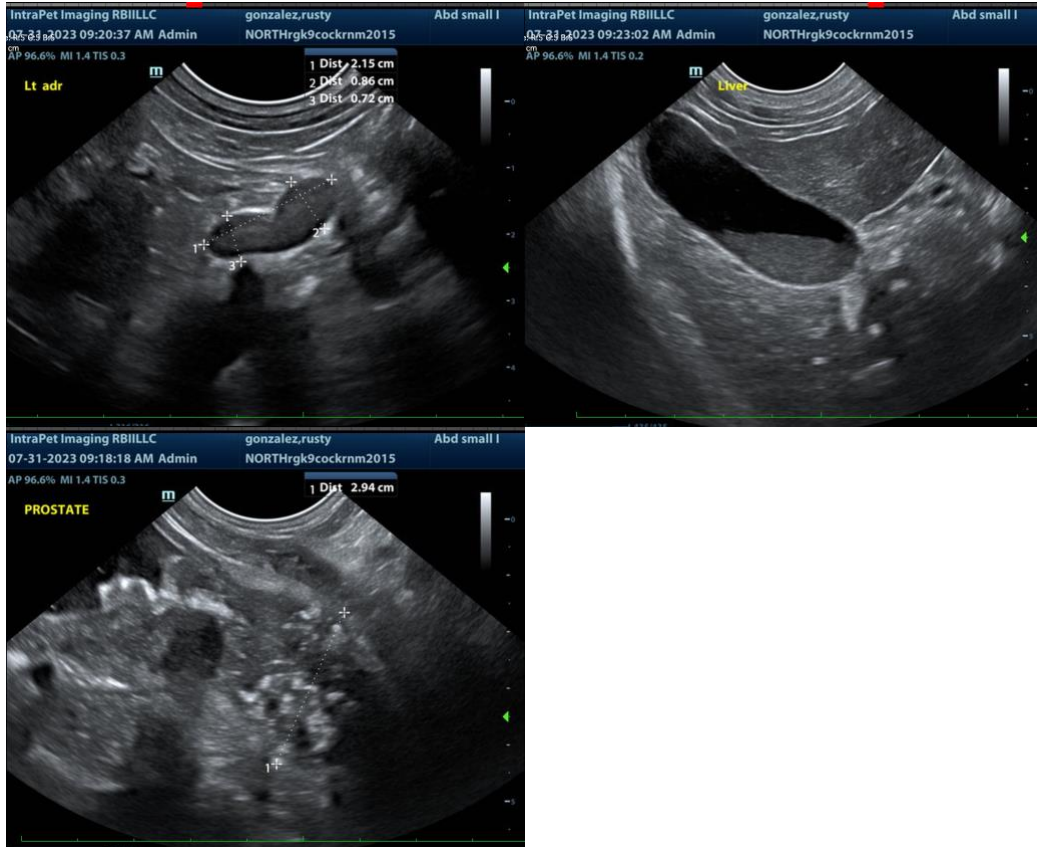
If not recently evaluated, three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.

Urinalysis and urine culture, if indicated based on urinalysis results, are recommended. Submission of urine to look for BRAF gene mutation, which is associated with urinary bladder/prostate cancer, could be considered. Other diagnostic options include traumatic catheterization, fine needle aspirate (with small risk of tumor seeding/trailing) or cystoscopy for further sampling. In the meantime, empirical therapy with a broad-spectrum antibiotic (or ideally an antibiotic based on culture and sensitivity results) as well as an anti-inflammatory (unless otherwise contraindicated based on patient co-morbidities) may begin to help alleviate clinical signs.

The remaining adrenal, liver and gallbladder changes could all be consistent with emerging hyperadrenocorticism, however, further work up of hyperadrenocorticism typically is not recommended in the face of concurrent and likely more severe illness. Therefore, the above recommendations and management of the suspected prostate/urinary bladder wall mass are recommended prior to further thoughts of hyperadrenocorticism at this time.







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.

Beth Johnson, DVM DACVIM
info@SonoPath.com