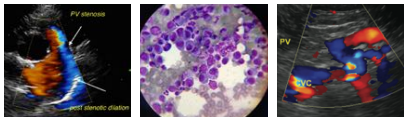
IMAGING PERFORMED BY

IntraPet.com



SonoPath
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DATE

8/8/22

PATIENT

Cody Devlin

SPECIES

Canine

BREED

West Highland Terrier

SEX

Neutered male

AGE

2/27/12

WEIGHT

20.3 lbs

INTERPRETED BY

Beth Johnson, DVM DACVIM

HOSPITAL NAME

Bayside AMC

REFERRING VET

Dr. Oliver

INVOICE

32212

PRESENTING CLINICAL SIGNS

Presented initially presented mid-July with vomiting/diarrhea/weight loss and inappetence, bloodwork done & noted mild to moderate elevation in renal parameters which corrected within 2 weeks, dog now eating normally and gaining weight back and renal values have returned to normal with supportive care. 2 weeks ago owner reported Cody now having dilute urine w/ PU/PD behavior and urinary incontinence as well, dog vaccinated for Lepto, did send out Lepto titers via PCR which are pending.
Current Medications: Metronidazole, Vetprofen, Simplicef, Betagen, Composure Pro soft chews.
Lab Results: Attached.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is adequately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Prostate is mildly enlarged and measured 1.2 cm. Parenchyma is diffusely homogenous and relatively hyperechoic. Normal distinct margins and symmetrical bilobed shape are maintained. This finding is likely normal patient variant, especially if patient was neutered as an adult; however, if patient was neutered as a puppy, prostatitis or, less likely, infiltrative neoplasia cannot be ruled out. This finding should be interpreted in combination with clinical signs, urinalysis results, etc. and either further investigated or monitored, as indicated.

Left kidney is normal is size (5.26 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.

Right kidney is normal is size (5.3 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.

Adrenal Glands

Left adrenal gland is normal in size (1.9 cm long, 0.52 cm at cranial pole and 0.7 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (2.0 cm long, 0.56 cm at cranial pole and 0.54 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

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.

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 (< 0.2 cm) 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 free peritoneal effusion noted in these images.

There is no apparent lymphadenopathy noted in these images.

ULTRASONOGRAPHIC FINDINGS
Primary Findings
- **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.

- **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.

- **Mild prostatomegaly**, likely normal patient variant especially if neutered later in life. However, prostatitis or less likely infiltrative neoplasia cannot be definitively ruled out.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS
1. If not recently evaluated a urine culture is recommended to rule out an occult urinary tract infection.
2. Testing for Leptospirosis is recommended as is reportedly already pending.

3. Blood pressure is recommended if not recently evaluated.
4. Differentials for polyuria and polydipsia are vast and include, but are not limited to a primary polyuria secondary to chronic kidney disease, pyelonephritis, liver disease, diabetes mellitus, hypercalcemia, hyper and/or hypoadrenocorticism, E. Coli infections, etc. or primary polydipsia secondary to psychogenic polydipsia, fever, pain, CNS disease, etc. Given this patient's recent history of azotemia the top differential is likely early chronic renal disease hence the above recommended Leptospirosis testing and urine culture. If not next steps could include a low-dose Dexamethasone suppression test, T4, bile acids and empirical course of antibiotics, etc. and if a diagnosis is still not obtained a more advanced work-up including possible water deprivation test, vasopressin trials, etc. may be warranted.

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
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