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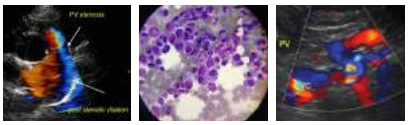

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DATE

9/3/21

PATIENT

Parker Gilbert

SPECIES

Canine

BREED

Pitbull Terrier

SEX

Male Neutered

AGE

12/25/11

WEIGHT

68.8 lbs.

INTERPRETED BY

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

HOSPITAL NAME

Timonium Animal Hospital

REFERRING VET

Dr. Kauder

INVOICE

11762kk

PRESENTING CLINICAL SIGNS

History: 8/17/21: peripheral enlarged lymph nodes (multiple)- (cytology: reactive lymphadenopathy), soft stool. 9/1/21: nodes reduced by 70% following Doxycycline, Metronidazole. Increased "noisy breathing" at rest, at home. Soft stool- mild improvement only on probiotic (Visbiome), metronidazole. Straining to defecate - ongoing.

Current Medications: Metronidazole 500mg- 1 PO BID (8/18-9/1), Doxycycline 100mg- 2 tabs BID (8/18-9/1), Cerenia 160mg- 1/2 PO SID (8/18-8/25).

Lab Results: CBC- increased nucleated RBC (HCT 39), mild alk phos elevation (195), SDMA 16. LN aspirate: rt popliteal- reactive.

Radiographs: Lateral abdominal rad & brief u/s scan-spleen appears possibly enlarged & poorly defined on lateral abd x-ray. Chest radiographs- normal.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Sedation not required for scan.

Stat Report: STAT report not requested by the veterinarian.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder and visible portion of the pelvic urethra are normal for the degree of luminal distension. The urine is anechoic with no evidence of debris. Cystic calculi and discrete masses are not observed.

The region of the prostate is not definitively visualized due to its pelvic location.

The left is mildly enlarged (8.71 cm in length) with normal shape and smooth peripheral contours. The cortex is hyperechoic to slightly heterogeneous in appearance. There is mild to moderate loss of corticomedullary distinction. Mild pyelectasia is present (0.35 cm in the longitudinal plane). A hyperechoic area is observed within the renal pelvis. Subcapsular fluid is present. proximal ureter is dilated (1.58 cm in diameter). 2.65 x 1.31 cm hyperechoic tissue is observed within the lumen in this region. Mesentery surrounding mesentery is hyperechoic and a small amount of retroperitoneal fluid is present.

The right kidney is mildly enlarged (9.07 cm in length) with normal shape and smooth peripheral contours. The cortex is hyperechoic to slightly heterogeneous in appearance. There is mild to moderate loss of corticomedullary distinction. Trace pyelectasia is present. Subcapsular fluid is present. There is questionable dilation of the proximal ureter. Surrounding mesentery is hyperechoic.

Adrenal Glands

The left adrenal gland is enlarged (1.96 cm at cranial pole) (1.63 cm at caudal pole) (4.73 cm in length); with an irregular shape. The parenchyma is mildly heterogeneous with loss of glandular detail. There is no obvious evidence of vascular invasion.

The right adrenal gland is severely enlarged (3.02 cm at cranial pole) (3.23 cm at caudal pole) (5.90 cm in length) with a mass-effect throughout the gland. The parenchyma is heterogeneous with a 1 ½ cm hyperechoic nodule/area at the caudal aspect. There is loss of glandular detail. There is no obvious evidence of vascular invasion. Surrounding mesentery is hyperechoic.

Spleen

The spleen is subjectively prominent in size (2.77 cm in width at the level of the hilus) with slightly swollen peripheral contours. A light micronodular pattern is present throughout the parenchyma. No distinct focal lesions are observed. Splenic vasculature appears normal with no evidence of thrombosis.

Liver
The liver is subjectively prominent in size with slightly rounded peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely mottled ("moth-eaten") in appearance. 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. Luminal contents are anechoic. The cystic and common bile ducts are normal/not seen.

Gastrointestinal
The gastric lumen is mildly to moderately 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. 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 mesentery throughout the abdomen is hyperechoic. Trace free fluid is observed. Several enlarged, hypoechoic lymph nodes are observed throughout the abdomen, including at the mesenteric root, in the right cranial quadrant, sublumbar area, and in the left to mid cranial abdomen. The largest node measures approximately 4.6 cm in length. Surrounding mesentery is hyperechoic.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- Hepatic parenchymal changes are concerning for infiltrative neoplasia (i.e., round cell tumor) with a lower possibility of a diffuse inflammatory process or microthrombi.
- The diffuse abdominal lymphadenopathy is also concerning for infiltrative neoplasia. However, severe lymphadenitis (i.e., pyogranulomatous) is also a differential.
- The bilateral renal changes could be consistent with inflammatory or infiltrative disease. The hyperechoic tissue within the left ureteral lumen may represent fat, inflammatory tissue, tumor, or other. Retroperitonitis is present, secondary to renal pathology.
- Bilateral adrenomegaly/masses, more severe on the right. Neoplasia is the top differential with a lower possibility of benign pathology (i.e., nodular hyperplasia).

Secondary Findings:

- The splenic parenchyma changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis or splenitis with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

1. A comprehensive tick panel, including PCR and serology (submission to North Carolina State University's Vector Borne Disease Diagnostic Lab is recommended. https://cvm.ncsu.edu/research/labs/clinical-sciences/vector-borne-disease/)
2. Fine needle aspirates of the liver and enlarged abdominal lymph nodes is recommended (if clotting status is appropriate). 25-guage needles should be used for aspiration.

3. Also consider a urine culture and sensitivity.

4. If the above diagnostics are inconclusive, an abdominal exploratory with biopsies of the liver, lymph nodes, +/- kidneys may be necessary to get a definitive diagnosis. However, given the multi-organ pathology, the prognosis is considered guarded for this patient.

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.

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