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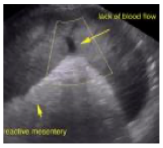
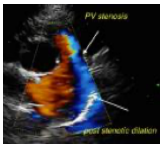
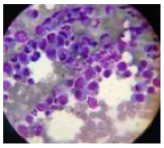
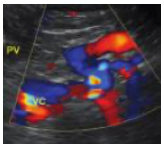
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Roxy Santiago

SPECIES

Canine

BREED

Boxer Mix

SEX

Spayed Female

AGE

9 years

WEIGHT

40 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Ferrer DVM

HOSPITAL NAME

Paseos VC

REFERRING VET

Dr. Belen Acevedo

INVOICE

11929

DATE

11.30.22

PRESENTING CLINICAL SIGNS

History: Presented as a referral for an abdominal ultrasound. The patient presented with severe anemia. Hx Cushing's Also diagnosed with HOOKWORMS, ANEMIA, HEART MURMUR. Blood transfusion was given on 11-22-22 and Epogen and Yunan Bai Yao were given on 11-28-22.

Abnormal PE/Chem/CBC/UA Results: PE: non provided BW: CBC: HCT 13.84 37.0-55.0 %, RBC 2.99 5.5-8.5 10^12/l, HGB 3.0 12.0-18.0 g/dl, MCV 46 60.0-77.0 fl, MCH 10.2 19.5-24.5 pg, MCHC 22.0 31.0-39.0 g/dl, RDWc 25.5 14.0-20.0 %, PLT 551 165.0-500.0 10^9/l CHEM: PHOS 6.8 * 2.9 6.6 mg/dL, CRE 2.4 * 0.3 1.4 mg/dL, BUN 49 * 7.0 25.0, AMY 1284 * 200.0 1200.0

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 1-2 cm, are normal.

The left kidney is normal size (5.94 cm in length) with normal shape and smooth peripheral contours. The cortex is hyperechoic relative to the spleen. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. Moderate pyelectasia is present (0.94 cm in the transverse plane). Echogenic debris is observed within the renal pelvis. There is no evidence of nephroliths, infarcts or hydroureter.

The right kidney is normal size (6.40 cm in length); with normal shape and smooth peripheral contours. The cortex is hyperechoic relative to the spleen. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. Moderate pyelectasia is present (0.94 cm in the transverse plane). Echogenic debris is observed within the renal pelvis. There is no evidence of nephroliths, infarcts or hydroureter.

Adrenal Glands

The left adrenal gland is enlarged (0.87 cm at cranial pole) (0.97 cm at caudal pole) (2.82 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.

The right adrenal gland is normal size (1.16 cm at cranial pole) (0.68 cm at caudal pole) (3.00 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.

Spleen

The spleen is subjectively normal in size (1.12 cm in width at the level of the hilus) with normal curvilinear peripheral contours. The parenchyma is subjectively hypoechoic and homogenous in appearance. No focal lesions are observed. Splenic vasculature appears normal with no evidence of thrombosis.

Liver

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is of appropriate echogenicity and echotexture and is homogenous in appearance. No focal lesions are observed. 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 moderate amount of gravity dependent, echogenic debris is observed within the lumen. 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. There is no evidence of an obstructive pattern.

Pancreas

The right limb is prominent in size with minimal deviation from the normal peripheral contours. The parenchyma is hyperechoic relative to surrounding omental fat and subtly mottled in appearance. No distinct focal lesions are observed. The pancreatic duct is not overtly dilated.

Free Abdomen

There is no evidence of free fluid. A 1.34 cm medial iliac lymph node is visualized. The node is normal in shape and echogenicity. One to two prominent mesenteric lymph nodes are also seen, the largest measuring 3.00 cm in length.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Bilateral nonspecific age-related renal changes. The bilateral pyelectasia could be secondary to pyelonephritis, age-related remodeling, or some combination thereof. The echogenic debris within both renal pelvises likely represents cellular material.

Secondary Findings

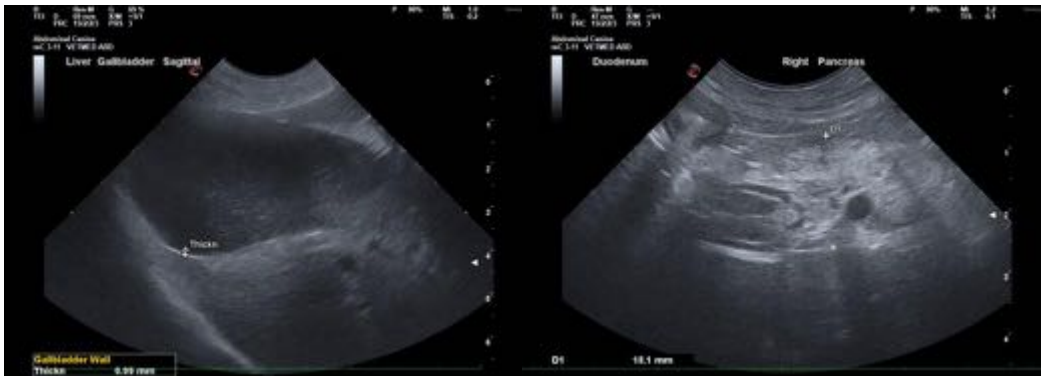
- Mild left adrenomegaly
- The hypoechoic splenic parenchyma may be secondary to extramedullary hematopoiesis (i.e., due to anemia), emerging neoplasia (less likely), decreased profusion, other.
- Age-related pancreatic remodeling with suspected fibrosis. Mild chronic pancreatitis is also possible, particularly if the patient's clinical history fits with this diagnosis.
- The lymph node changes are most consistent with reactive lymphadenitis or lymphoid hyperplasia.

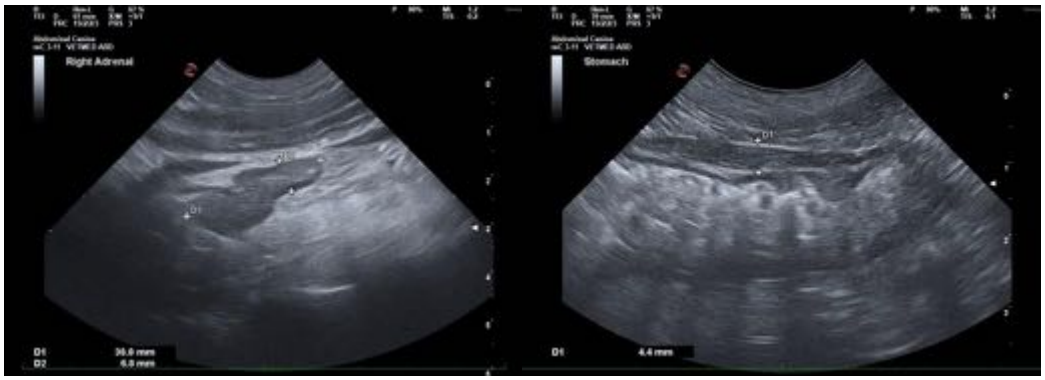
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Given the patient's azotemia and sonographic renal changes, the following diagnostic/therapeutic are recommended:

    1. Urine culture and sensitivity
    2. UPC (if proteinuria is present in the absence of infection)
    3. Baseline blood pressure measurement
    4. IV fluid diuresis and empirical treatment for pyelonephritis while awaiting urine culture and sensitivity results
    5. Consider transitioning to a prescription renal diet when the patient is stabilized and eating again.

- Regarding the anemia, a CBC with reticulocyte count is recommended to assess for regeneration. If a regenerative anemia is present, it may be secondary to hookworm infection, hemolysis, or blood loss, and further work-up should be pursued accordingly.





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)
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