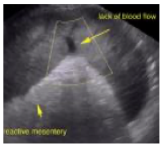
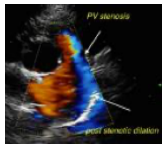
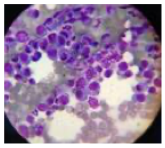
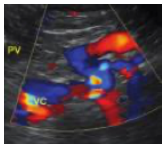
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT
Dayna Vazquez

SPECIES
Canine

BREED
Schnauzer

SEX
Spayed Female

AGE
11 years

WEIGHT
16.3 lbs

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

IMAGING PERFORMED BY
Dr. G. Ferrer DVM

HOSPITAL NAME
Paseos VC

REFERRING VET
Dr. F. Ortiz, DVM

INVOICE
11919

DATE
10.28.22

PRESENTING CLINICAL SIGNS

History: Presented for an abdominal ultrasound. Patient came in for blood transfusion from another clinic. CBC - severe anemia chem - hypo proteinemia and severely elevated bilirubin fecal - neg plan: 1. immune panel 2, 4dx - + ehrlichia 3. ultrasound rule out pancreatic liver or vesicular dz 4. Radiographs Pt got a blood transfusion 10-26-22

Abnormal PE/Chem/CBC/UA Results: PE: Severe icterus CBC: HCT: 11% Platelets: 68 WBC: 21 Neu: 18 , CHEM: Alb 2, Tbili10.5 (0.1-0.6), Glu 113, TP: 4.4 4DX: ehrlichia positive

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 distended. A scant amount of suspended, echogenic debris is observed within the lumen. No masses, inflammatory changes or calculi are observed. The region of the trigone and the visible portion of the proximal urethra are normal.

The **left kidney** is normal size (5.24 cm in length); with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis.

The **right kidney** is normal size (5.66 cm in length); with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis.

Adrenal Glands

The **left adrenal gland** is normal size (0.46 cm at cranial pole) (0.49 cm at caudal pole) (2.34 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 (0.43 cm at cranial pole) (0.41 cm at caudal pole) (2.08 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 enlarged with irregular peripheral contours. An approximately 3.50-4.00 cm isoechoic swelling is observed approximately mid-spleen. Within the swelling, a 1.00 cm heterogenous nodule with a cavitated center is visualized near the medial aspect. The splenic parenchyma is diffusely mottled and heterogenous. Splenic vasculature appears normal with no evidence of thrombosis.

Liver

The **liver** is prominent to enlarged with swollen peripheral contours. The parenchyma is isoechoic relative to the spleen. A few, ill-defined hyperechoic nodules are visualized. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

The **gall bladder** distended. The wall is thickened (up to 0.21 cm) and edematous with a “double-walled” effect. A small amount of suspended, echogenic debris 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 thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The ileocecocolic junction and colonic wall are normal. The lumen of the descending colon contains liquid-appearing fecal material. There is no obvious evidence of an obstructive pattern.

Pancreas

The base and right limb of the **pancreas** are 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

There is no obvious evidence of free fluid. One to two prominent mesenteric **lymph nodes** are visualized, the largest measuring 0.73 cm in length. The nodes are normal in shape and echogenicity.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The splenic swelling and nodule are concerning for infiltrative neoplasia (i.e., round cell tumor). However, a benign process (i.e., excessive lymphoid hyperplasia, extramedullary hematopoiesis) cannot be completely excluded.
- The hepatic parenchymal changes are most consistent with a benign process (i.e., vacuolar hepatopathy and/or regenerative nodular hyperplasia). Infiltrative neoplasia (i.e., lymphoma) is a consideration. Given the normal ALT, inflammatory disease is considered less likely.
- The gall bladder changes could be secondary to autoimmune disease, recent blood transfusion, cholecystitis, increased hydrostatic pressure (i.e., due to right-sided congestive heart failure, if applicable), hypoalbuminemia, other.

Secondary Findings

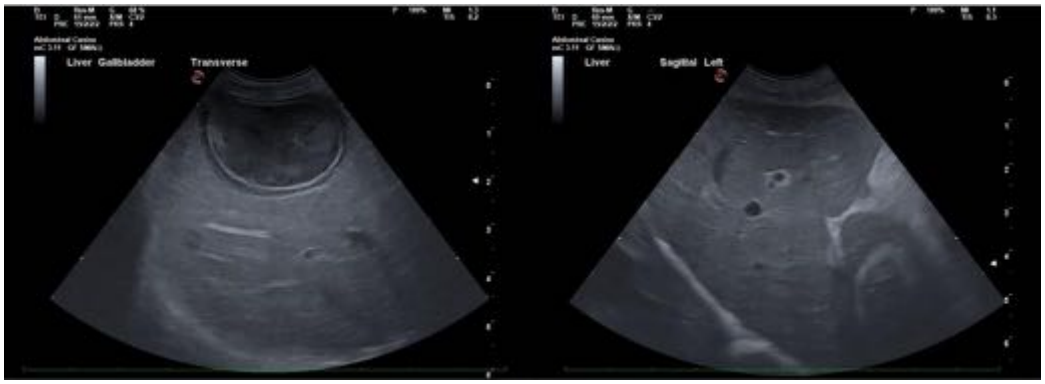
- Bilateral chronic renal changes with dystrophic mineralization
- Minor, age-related pancreatic remodeling
- Diarrheic stool
- The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

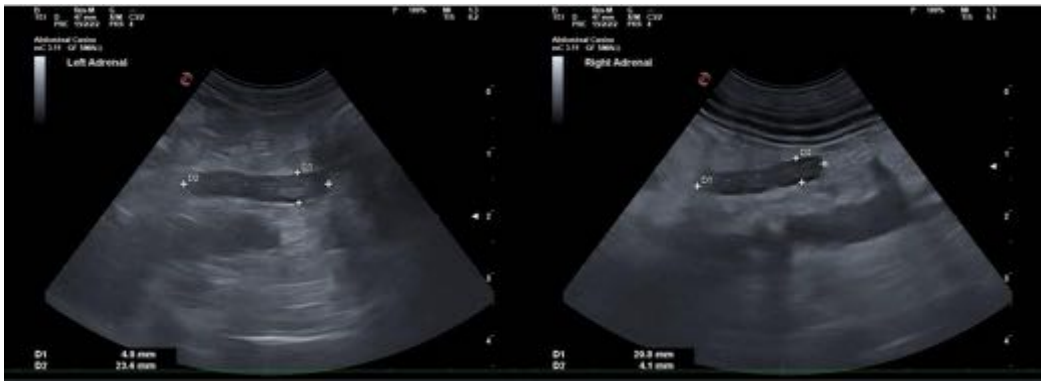
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

If the platelet count can be stabilized, fine-needle aspirate of the spleen +/- liver are recommended to assess for infiltrative neoplasia.

Thoracic radiographs are also recommended to assess for pathology in the chest.

Given the positive Ehrlichia test, consider a comprehensive tick panel (send to NC State University Vector-borne Disease Lab) to assess for concurrent infections (i.e., Babesiosis).





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