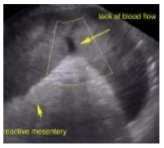
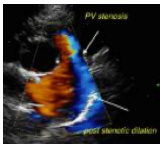
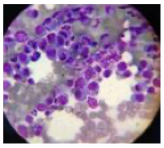
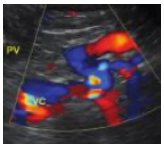
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT
Nicolas Cebollero

SPECIES
Canine

BREED
Beagle

SEX
Neutered Male

AGE
10 years

WEIGHT
50 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
Dra. Martes

INVOICE
11376

DATE
8.8.22

PRESENTING CLINICAL SIGNS

History: Presented for an abdominal ultrasound and echocardiogram. Pt BAR no diarrhea yes to soft stool. had an episode of vomit 3-4 days ago. Client changes diet to chicken and rice to help pet with vomiting. Has had history of pancreatitis.

He is currently on hepatic diet, Denamarin and thyro tabs 0.6 mg SID. Also have grade III/VI left systolic heart murmur. The abdominal is to evaluate the liver enzyme elevation.

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 2 cm, are normal.

The **prostate** is normal in size (1.04 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The **left kidney** is normal size (6.01 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

The **right kidney** is normal size (6.49 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The **left adrenal gland** is normal size (0.53 cm at cranial pole) (0.49 cm at caudal pole) (2.60 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 prominent at the cranial pole and normal in size at the caudal pole (1.16 cm at cranial pole) (0.42 cm at caudal pole) (2.99 cm in length); with a slightly irregular shape. A 2.92 x 1.11 cm hyperechoic nodule/mass is observed at the cranial aspect. Glandular echogenicity and detail at the caudal aspect are normal. The phrenicoabdominal vein and surrounding vasculature appear normal.

Spleen

The **spleen** is subjectively prominent to enlarged (1.92 cm in width at the level of the hilus) with swollen, undulating peripheral contours. The parenchyma is homogenous. 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 hypoechoic relative to the spleen and subtly mottled in appearance, with several, small cystic areas throughout the organ. 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 small to moderate amount of aggregated, echogenic partially dependent debris/sludge 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 colonic wall is normal. There is no evidence of an obstructive pattern.

Pancreas

The right limb of the **pancreas** is visible with normal curvilinear peripheral contours. The parenchyma is mildly hyperechoic 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 evidence of free fluid. The medial iliac **lymph nodes** are enlarged, with rounded contours and a mildly hypoechoic parenchyma relative to surrounding omental fat. The left node measures 6.61 x 2.41 cm. The right node measures 5.48 x 1.80 cm. In addition, a 0.81 cm mesenteric lymph node is seen.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The medial iliac lymphadenopathy is concerning for a neoplastic process (i.e., round cell tumor, metastatic disease). However, severe lymphadenitis (i.e., pyogranulomatous) cannot be completely excluded.
- The splenic changes could also be consistent with infiltrative neoplasia. Alternatively, a benign process (i.e., lymphoid hyperplasia, extramedullary hematopoiesis, or similar) is also possible.
- An obvious cause for the elevated liver enzymes is not identified in the study. However, a microscopic hepatopathy (i.e., bacterial cholangiohepatitis, Leptospirosis, chronic active hepatitis, copper-associated hepatotoxicity, infiltrative neoplasia (less likely)) cannot be excluded. The cystic hepatic lesions are likely a benign incidental finding.
- Aspirates of the spleen and medial iliac lymph nodes were performed during this study.

Secondary Findings

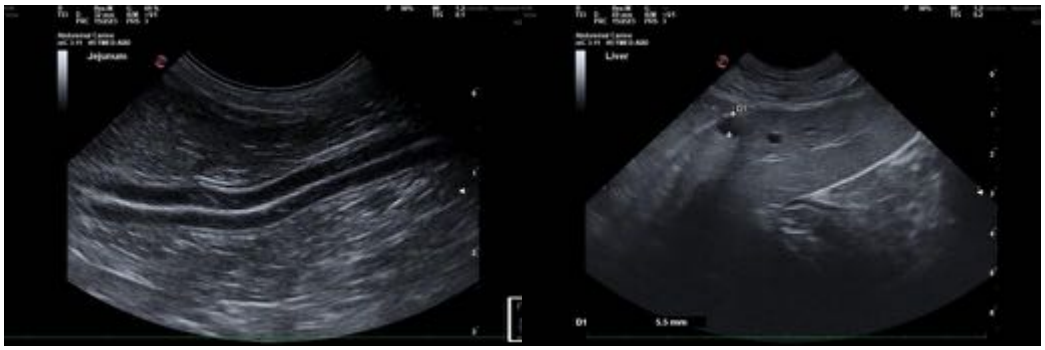
- Minor, bilateral, age-related renal changes. The right adrenal nodule trend toward the benign (i.e., nodular hyperplasia). However, an emerging tumor is also a possibility.
- Gall bladder debris/sludge, non-mucocele
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Three-view thoracic radiographs are recommended to assess for occult neoplasia in the chest.

If splenic and lymph node cytology results are inconclusive, surgical biopsies may be necessary to get a definitive diagnosis. If pursued, a liver biopsy along with aerobic and anaerobic bile cultures and acquisition of additional hepatic tissue samples for potential copper quantitation should be considered.

While awaiting test results, empirical treatment for bacterial cholangiohepatitis (i.e., broad-spectrum antibiotics, fluid therapy, gastric protectants, antioxidants) should be initiated.



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.

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