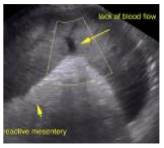
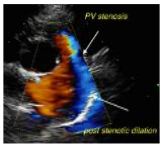
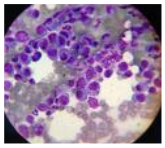
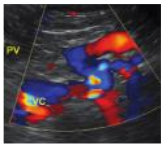
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™





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

PATIENT
Tank Dinulos

SPECIES
Canine

BREED
Italian Greyhound

SEX
Neutered Male

AGE
14 Years

WEIGHT
19.8 Lbs

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

IMAGING PERFORMED BY
Jenn

HOSPITAL NAME
Rockaway AH

REFERRING VET
Dr. Ascot

INVOICE
11436

DATE
8.18.22

PRESENTING CLINICAL SIGNS

HistoryP: acute onset vestibular dz

Abnormal PE/Chem/CBC/UA Results: decreased Lymph decreased Phos increased ALT decreased total T4

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. The region of the trigone is normal.

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

The **left kidney** is normal size (4.59 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. A 0.40 cm cortical cyst is observed at the medial aspect. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

The **right kidney** is normal size (4.95 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

Adrenal Glands

The **left adrenal gland** is borderline enlarged (0.63 cm at cranial pole) (0.54 cm at caudal pole) (1.79 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 (0.94 cm at cranial pole) (0.47 cm at caudal pole) (1.72 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 (1.19 cm in width at the level of the hilus) with normal curvilinear peripheral contours. The parenchyma is of appropriate echogenicity and echotexture. Ill-defined hyperechoic areas/speckling are observed throughout the organ, particularly at the cranial to mid aspect. Splenic vasculature is normal with no evidence of thrombosis.

Liver

The **liver** is subjectively prominent in size with swollen curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits mild heterogeneity. No distinct focal lesions are observed. Hepatic vasculature and biliary tracts are of normal volume with no evidence of congestion.

The **gall bladder** is moderately distended. The wall is thickened and hyperechoic to mineralized. A small amount of gravity dependent, mineralized sand 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 is mildly thickened (up to 0.67 cm) with retention of the 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 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 **peritoneal cavity** is normal. There is no evidence of inflammation or effusion. The abdominal **lymph nodes** are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Nonspecific diffuse hepatopathy. Differentials include inflammatory disease, reactive hepatopathy, hepatotoxicosis (i.e., copper), Leptospirosis, +/- concurrent benign age-related change (i.e., vacuolar hepatopathy).

- The mineralized gall bladder wall (aka "porcelain" gall bladder) is most consistent with cholecystitis. However, in rare instances it can be associated with biliary adenocarcinoma.

Secondary Findings

- Mild bilateral, degenerative renal changes.

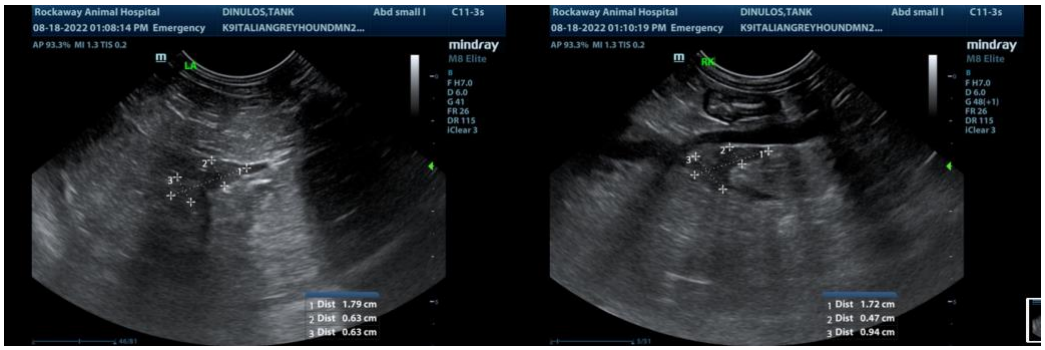
- The hyperechoic areas within the splenic parenchyma trend toward the benign (i.e., lymphoid hyperplasia, myelolipomas) with a lower possibility of emerging neoplasia.

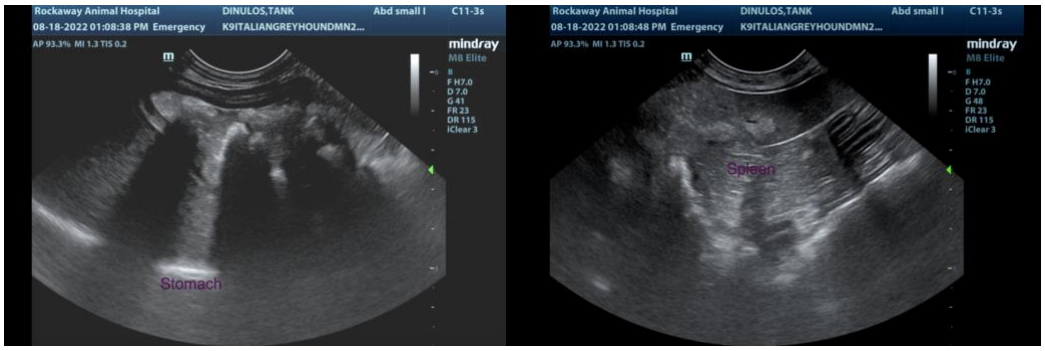
- The gastric wall changes are most consistent with and inflammatory process (gastritis) with a lower possibility of hypertrophy or emerging neoplasia.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given the patient's clinical history, consider the following:

1. Free T4 by equilibrium dialysis
2. Pre-and postprandial serum bile acids to assess for hepatic dysfunction as a possible cause for neurologic disease.
3. Baseline blood pressure measurement to assess for systemic hypertension
4. Three-view thoracic radiographs are recommended to assess cardiopulmonary status and to assess for occult neoplasia in the chest.
5. If the patient's clinical signs do not resolve over the next 5-7 days or if central vestibular disease is suspected, consider referral to a board-certified neurologist for further work-up.





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