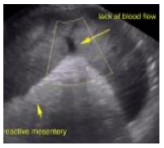
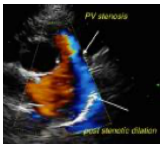
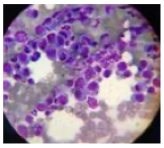
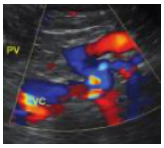
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT
Blue Grant

SPECIES
Canine

BREED
Border Collie Mix

SEX
Spayed Female

AGE
10.5 years

WEIGHT
32.2 kg

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

IMAGING PERFORMED BY
Dr Trudeau

HOSPITAL NAME
Petworks VH

REFERRING VET
Dr Trudeau

INVOICE
11174

DATE
6.28.22

PRESENTING CLINICAL SIGNS

History: hypothyroid; over the last 5-6 mos drinking more, panting more and seeking cool temperatures; last month she doesn't want to move around as much - will let the owner get out of her sight which is atypical
Abnormal PE/Chem/CBC/UA Results: CBC - WNL Chem - high normal SDMA with increased ALP 1823 U/L (23-212); otherwise WNL ACTH stim - normal U/A and UPC – pending

Thirty-one still images and 14 video clips are available for interpretation.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

(Four still images are available for interpretation.)
The **urinary bladder** is distended. The wall is normal in thickness with a smooth mucosal surface. Lumincal contents are mostly anechoic. No cystic calculi are observed. The region of the trigone appears normal.

The **left kidney** is normal size (6.31 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

The **right kidney** is normal size (6.11 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

Adrenal Glands

The **left adrenal gland** is normal size (0.53 cm at cranial pole) (0.71 cm at caudal pole) (3.35 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 (1.49 cm at cranial pole) (0.63 cm at caudal pole) (2.99 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

(Four still images are available for interpretation.)
The **spleen** is subjectively normal in size with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

Liver

The **liver** is subjectively prominent in size with slightly swollen/irregular peripheral contours. The parenchyma is isoechoic relative to the spleen and heterogenous in appearance. An approximately 7.50 cm ill-defined, hyperechoic to heterogenous area/mass is visualized at the caudal aspect. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

Gall bladder

(Three images are available for interpretation.)
The **gall bladder** lumen is moderately distended. The wall is thin and smooth. A small to moderate amount of aggregated, echogenic, mostly gravity dependent debris/sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

(Eight still images are available for interpretation.)
The **gastric lumen** is not distended. The gastric wall is normal in thickness with a normal layering pattern. The small intestinal lumen is not dilated. The small intestinal wall is normal in thickness with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. There is no obvious evidence of an obstructive pattern.

Pancreas

(One still image is available for interpretation.)
In the visible portion of the **pancreas**, the organ is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat. No distinct focal lesions are observed. The pancreatic duct is not overtly dilated.

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

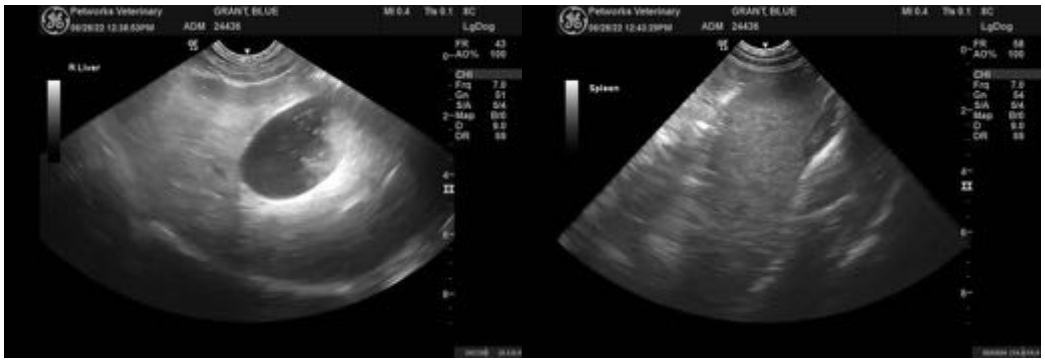
- The hyperechoic to heterogenous area/mass within the liver could be consistent with a tumor (i.e., adenocarcinoma, adenoma) , a region of excessive regenerative nodular hyperplasia or vacuolar hepatopathy, an inflammatory focus, other.

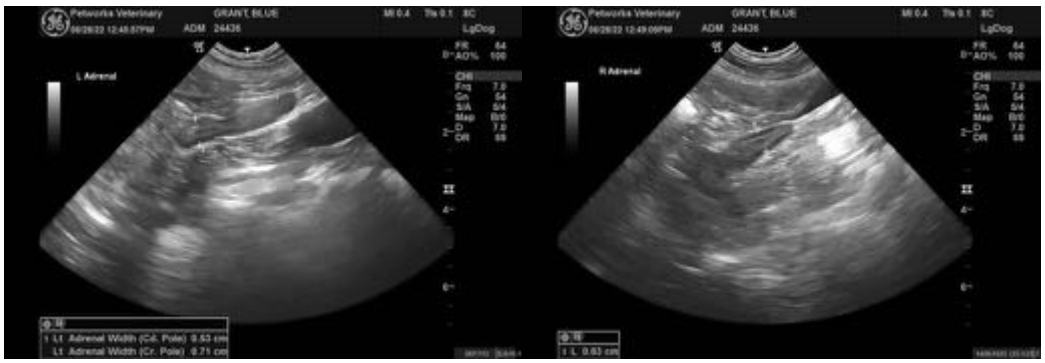
Secondary Findings

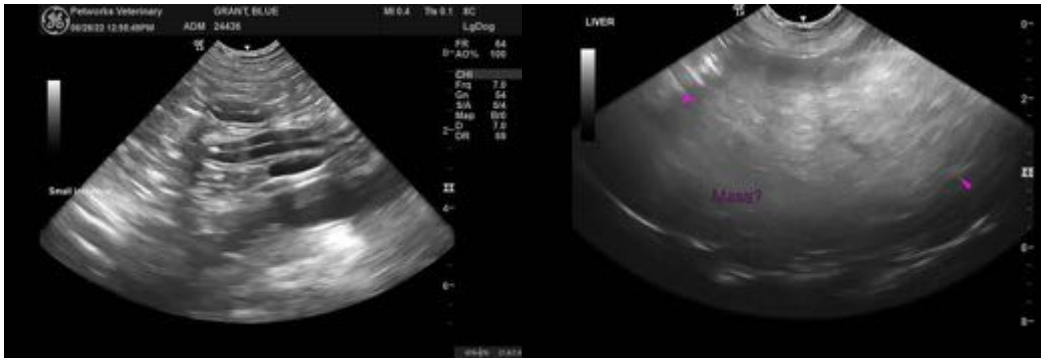
- Gall bladder debris/sludge, non-mucocele
- Right, minor bilateral age-related renal changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Consider pre-and postprandial serum bile acids to assess hepatic function.
- Consider hepatic tissue sampling (i.e., fine-needle aspirate or surgical biopsy) with particular attention to the hyperechoic to heterogenous area/mass. Surgical biopsies are preferred in that they are more likely to yield a definitive diagnosis. If surgery is pursued, consider referral to a board-certified surgeon in case a resectable mass is present. An abdominal CT scan would be useful in presurgical planning. Thoracic radiographs are recommended prior to any anesthetic event.
-
- Given the polydipsia, also consider a urine culture and sensitivity to assess for occult pyelonephritis.







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, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com