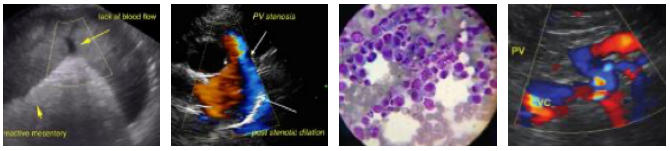
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Brandy Jackowitz

SPECIES

Canine

BREED

Labrador Retriever mix

SEX

Female, spayed

AGE

11 Yrs.

WEIGHT

48 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Megan Cassels-Conway

HOSPITAL NAME

Central Broward AH

REFERRING VET

Dr. Megan Cassels-Conway

INVOICE

12361

DATE

10/18/21

PRESENTING CLINICAL SIGNS

History: Presented for hindlimb arthritis. BLoodwork showed elevated liver enzymes and hypercalcemia. History of previously diagnosed hypothyroidism, currently untreated.
Abnormal PE/Chem/CBC/UA Results: 10/2/2021 CBC wnl Chem: TP 8.7, Glob 4.7, ALT 135, ALP 247, TBili 0.5, Phos 6.1, Ca 12.9, Na 166, Chol 374, TG 901 UA 1.023, 3+ protein, pH 7.5

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and pelvic urethra are 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 left kidney is normal size (6.43 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

The right kidney is normal size (6.97 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is enlarged (1.31 cm at cranial pole) (0.84 cm at caudal pole) with a slightly irregular shape. A 2.16 x 1.26 cm hyperechoic to slightly heterogeneous nodule is observed in the cranial to mid aspect. The glandular echogenicity and detail at the caudal aspect are unremarkable. The phrenicoabdominal vein and surrounding vasculature are normal.

The region of the right adrenal gland is evaluated. The gland itself is not visualized, however no obvious pathology is observed.

Spleen

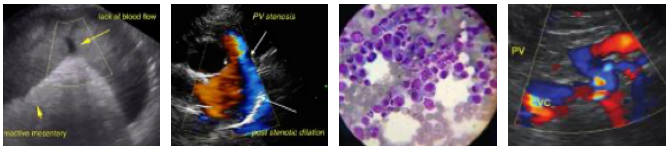
The spleen is normal in size (1.81 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. A few small myelolipomas are observed in the region of the hilus. Splenic vasculature is normal.

Liver

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely mottled in appearance with numerous varying size hypoechoic nodules throughout the organ. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is distended. The wall is normal in thickness. A large amount of aggregated echogenic suspended sludge in a partially stellate pattern 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



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thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

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:

- Gallbladder changes are consistent with emerging mucocele.
- The hepatic parenchymal changes are non-specific and could be associated with benign pathology (i.e., regenerative nodular hyperplasia +/- concurrent vacuolar hepatopathy), infiltrative neoplasia (i.e., round cell tumor), multifocal inflammatory disease, other.
- The left adrenal changes could be consistent with nodular hyperplasia or an early neoplastic process. The right adrenal gland is not definitively visualized.

Secondary Findings:

- Minor age-related renal pathology.

*An obvious cause for the patient's hypercalcemia is not identified in this study. Considerations include occult neoplasia, primary hyperparathyroidism, other.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- A thorough rectal examination as well as three-view thoracic radiographs are recommended to further assess for neoplastic causes of hypercalcemia.
- A PTH/PTHrP and ionized calcium levels (Michigan State University Veterinary Diagnostic Laboratory) is recommended; https://cvm.msu.edu/vdl/laboratory-sections/endocrinology.
- Given the gall bladder changes, Ursodeoxycholic acid (Ursodiol) is recommended. Serial sonographic monitoring (e.g., every 6-8 weeks) of the gall bladder is recommended to assess for progression to a fully-formed mucocele.
- Consider a fine needle aspirate of the liver (if clotting status is appropriate). A 25-gauge needle should be used. If results are inconclusive and further evaluation is desired, a surgical liver biopsy and prophylactic cholecystectomy. If surgery is pursued, referral to a board-certified surgeon is recommended due to the potential for perioperative complications.

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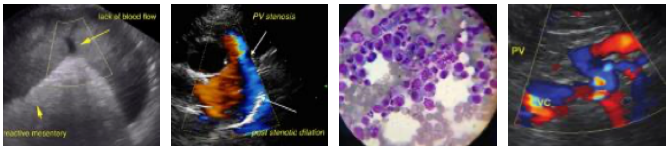

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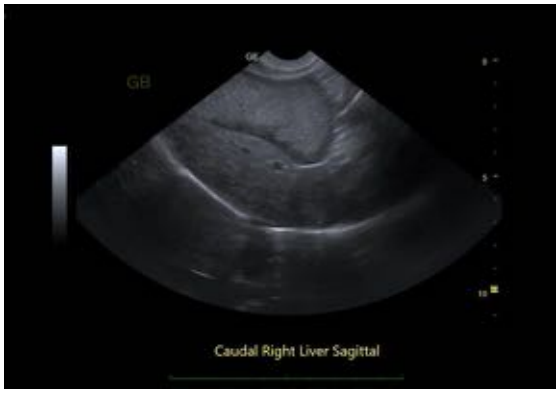

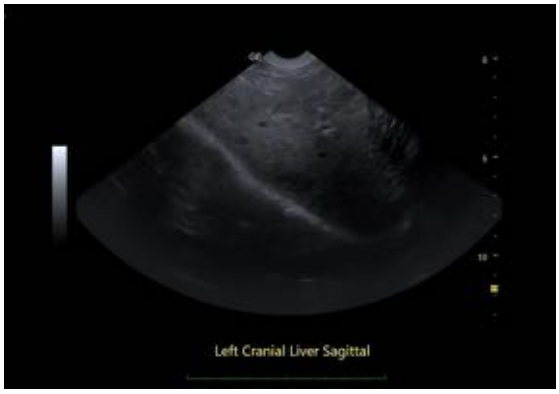

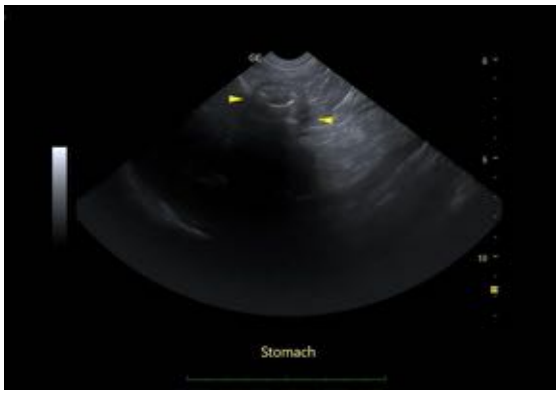

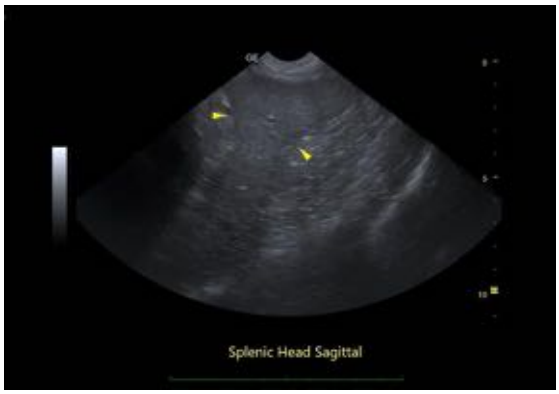

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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