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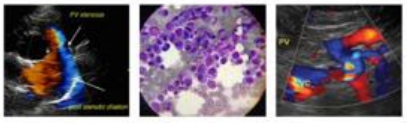
svsimagingqc.net 309-737-3070



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT

Avery Krupp

SPECIES

Canine

BREED

Jack Russell Terrier

SEX

Spayed Female

AGE

17 years

WEIGHT

18.6 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Amy Mayhew LVT

HOSPITAL NAME

SVS Imaging MI

REFERRING VET

Rochester VH

INVOICE

11362

DATE

8.8.22

PRESENTING CLINICAL SIGNS

History: Recheck fasted lab work after med trial.
Abnormal PE/Chem/CBC/UA Results: Exam findings and abnormal lab values: Liver values did not increase after med trial (Amoxicillin and Metronidazole Medi-Melts 50mg)

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** 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 1-2 cm, are normal.

The **left kidney** is normal size (4.26 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 (4.55 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 enlarged (1.88 cm at cranial pole) (2.74 cm at caudal pole) (5.44 cm in length); with an irregular shape. A mass is observed at each pole. The cranial mass measures 2.63 x 1.88 cm and appears relatively homogenous. The mass at the caudal pole measures 3.06 x 2.74 cm and is heterogenous with a few ill-defined mineralized foci, as well as a cavitated area. There is no obvious evidence of vascular invasion.

The **right adrenal gland** is enlarged (0.39 cm at cranial pole) (1.15 cm at caudal pole). A 1.39 x 1.14 cm slightly heterogenous nodule is observed at the caudal pole. Glandular echogenicity at the cranial poles appears normal. Surrounding vasculature appear normal.

Spleen

The **spleen** is normal in size (1.34 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

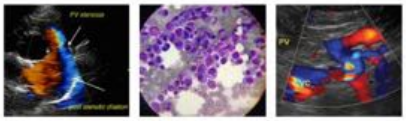
Liver

The **liver** is subjectively prominent in size with swollen curvilinear peripheral contours. The parenchyma is hypoechoic 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** lumen is moderately distended. The wall is thin and smooth. A small to moderate amount of aggregated, echogenic to mineralized debris/sludge, +/- a 0.50 cm distinct cholelith is observed. 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



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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 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

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 would depend on the liver enzyme pattern. If ALP is disproportionately elevated relative to the ALT, benign age-related changes (i.e., regenerative nodular hyperplasia, and/or vacuolar hepatopathy) would be more likely. If ALT is substantially elevated, inflammatory disease (i.e., bacterial cholangiohepatitis, chronic active hepatitis), hepatotoxicosis (i.e., copper), Leptospirosis, and other hepatopathies, would be more likely.
- Mineralized gall bladder debris, +/- a distinct cholelith – incidental/non-mucocele
- Left adrenal masses with a right adrenal nodule. These lesions may represent a benign process (i.e., excessive nodular hyperplasia). Alternatively, neoplasia (i.e., adenoma, adenocarcinoma, pheochromocytomas) may be present.

Secondary Findings

- Age-related pancreatic remodeling
- Bilateral, chronic, age-related renal changes with dystrophic mineralization

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

If liver values, particularly the ALT, remain persistently elevated, further work-up (i.e., Leptospirosis testing, pre-and postprandial serum bile acids, hepatic tissue sampling) may be warranted. Regarding hepatic tissue sampling, hepatic cytology is best for evaluating for round cell neoplasia and vacuolar hepatopathy but is less useful in diagnosing other hepatopathies. Surgical biopsies are preferred in that they are more likely to yield a definitive diagnosis. If pursued, aerobic and anaerobic bile cultures and acquisition of additional hepatic tissue samples for potential copper quantitation are recommended.

Regarding the adrenal nodules/masses, consider the following:

1. Thoracic radiographs to assess for pulmonary metastatic disease
2. Consider a baseline blood pressure measurement
3. +/- further testing for functional tumors (particularly if the patient is symptomatic). Such testing could include a low-dose dexamethasone suppression test and urine/blood catecholamine levels.

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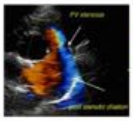
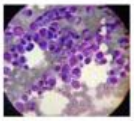
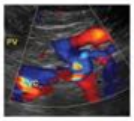

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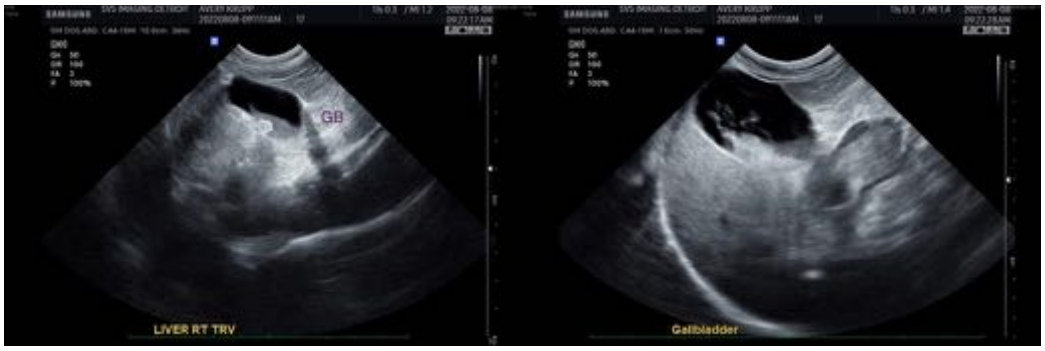

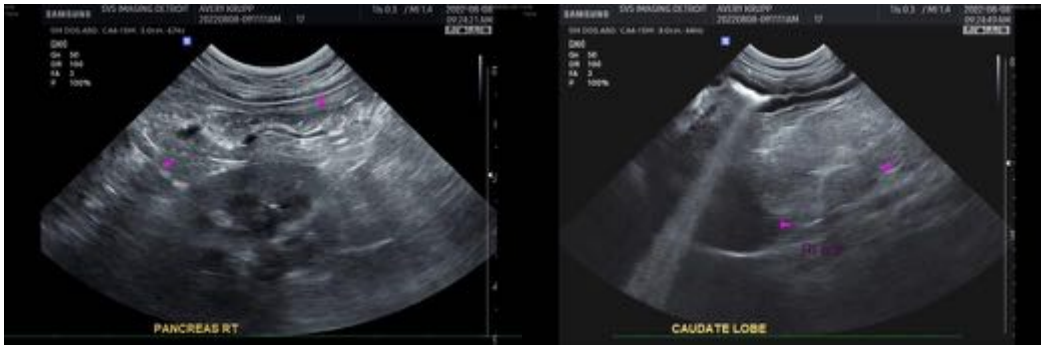

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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