



PATIENT

Cole Hitt

SPECIES

Canine

BREED

Blue Blood Bulldog

SEX

Neutered Male

AGE

9 Years

WEIGHT

39.0 kg

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Renee Trionfetti, VMD

HOSPITAL NAME

Blue Pearl Wyomissing

REFERRING VET

Kristen Woltman, DVM

INVOICE

75321

DATE

5/20/26

PRESENTING CLINICAL SIGNS

Recheck AUS monitoring chronic liver enzyme elevation despite use of Denamarin. E/D normally, no V/D.

Abnormal PE/Chem/CBC/UA Results: Prev AUS SonoPath review: 11/13/24: mild non-specific changes to the liver., subjectively small in size 2/24/25: AUS at BP Malvern: Liver- small in volume, Full retraction of the caudate liver lobe from renal fossa from the cranial pole of rt kid. Diffuse, coarse, hyperechoic parenchymal mottling with irregular, blunted intrahepatic PV triad arborization. 1.71 cm diameter, poorly defined hypoechoic mass in the body region of the quadrate lobe. Findings: Chronic active hepatitis with fibrosis and atrophy. Regenerative nodular hyperplasia, no portal HTN, no signs of end-stage cirrhosis. Nov 2025: - CBC: Hct 51.5%, Plts 340, remainder NSF - Chem: ALP 232 H (0-140), prev 159, ALT 168 H (0-120) prev 207, Chol 377 H, GGT 10-n, Alb 3.7-n, remainder NSF - T4: 1.4-n - Cortisol 2.4-n - USG 1.041

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is adequately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Prostate is normal in size, echotexture and echogenicity for a neutered male. Multifocal prostatic mineral densities are noted.

The right kidney is normal is size (7.11 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

The left kidney is normal is size (7.24 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Adrenal Glands

The right adrenal gland is normal in size (1.0 cm at cranial pole and 0.66 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.57 cm at cranial pole and 0.63 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Spleen

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

Liver is subjectively small in size with slightly undulating or scalloped capsular contour or margins. Parenchyma is diffusely heterogenous with increased portal markings and coarse architecture. No focal



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nodules or masses are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). The lumen is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta/chyme. There is no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The pancreas that is observed appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

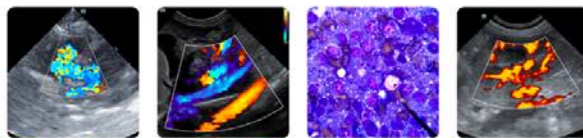
Free Abdomen

There is no visible free peritoneal effusion noted in these images.

There is no apparent pathologic lymphadenopathy noted in these images.

ULTRASONOGRAPHIC FINDINGS

- The microhepatica is a static and historical finding with unchanged differentials including chronic inflammatory hepatopathy. Early or emerging cirrhosis and vascular anomaly cannot be definitively ruled out. This finding should be interpreted in combination with full general metabolic health screen including bile acids if patient's total bilirubin is not increased.
- Mild gallbladder debris - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.
- The prostatic mineralization is a non-specific finding and could be a benign chronic inflammatory or dystrophic mineralization change, although prostatic neoplasia can't be definitively ruled out.



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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

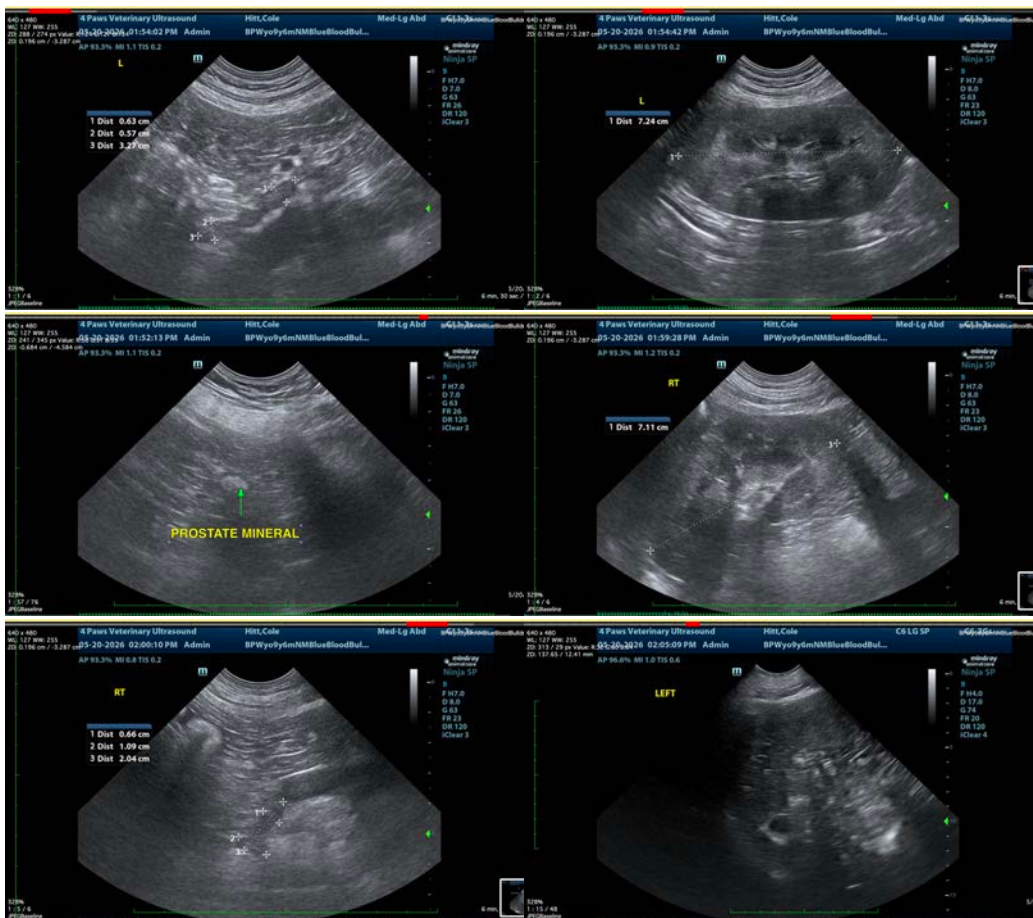
Three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.

If not recently evaluated, a urinalysis and, if indicated based on urinalysis results, urine culture is recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ratio is recommended.

Additionally, submission of urine to look for BRAF gene mutation could be considered to more definitively investigate/rule out uroepithelial neoplasia.

Additionally, and/or alternatively, fine needle aspirates of the prostate could be considered if patient's coagulation status is appropriate.

Further workup of the microhepatica largely depends on previous workup, those results, etc., but could include bile acid testing if patient's total bilirubin is not increased, and/or ultimately a liver biopsy, being sure to include copper level assessment.





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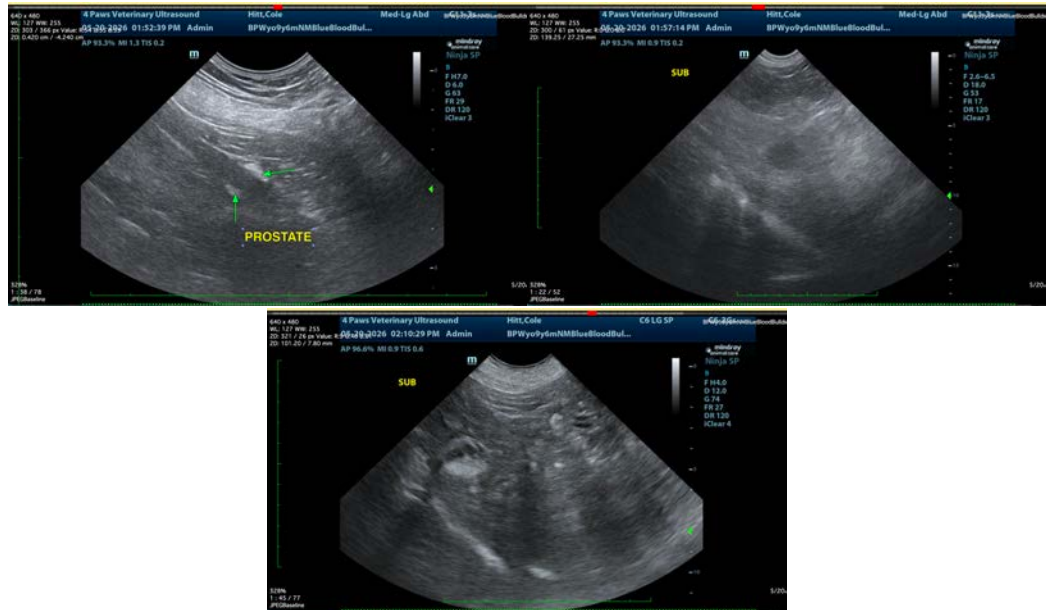
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Beth Johnson, DVM, DACVIM
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