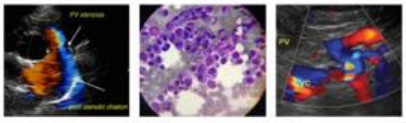

PATIENT

Chloe Marshall 277436

SPECIES

Canine

BREED

Maltese

SEX

Spayed Female

AGE

5 years

WEIGHT

3.5 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Tom McNeill

HOSPITAL NAME

SVS Imaging CT

REFERRING VET

WVRC Dr. Jochman

INVOICE

11441

DATE

8.18.22

PRESENTING CLINICAL SIGNS

History: Chloe presented to WVRC's Emergency Service on 8/17/2022 as a transfer from Premier Grayslake due to elevated LEs/owner being interested in AUS. ~1 week ago, owner found a tick on Chloe's ear. She does regularly receive Frontline. 08/11/2022, vomited once. Appetite has been fine this entire time. Ate normally last night. Vomited once overnight, today, as well as on car ride. Went to Premier Grayslake for this: - PE: 102.0, 100 bpm, panting - SQF 150 mL, maropitant 3.2 mg SQ

Abnormal PE/Chem/CBC/UA Results: ABXR (DACVR): "Mild, diffuse gastroenteropathy with nonobstructive colonic foreign material...negative for mechanical obstruction..." - CBC: WBC 8.77 (N), HCT 49.4 (N), PLT 228 (N) - Chem/lytes: ALT 1650 (H), AST 312 (H), ALP 144 (H), GGT 30 (H), tbili <0.1 (N), chol 338 (H), K 3.7 (trivially L), Cl 101 (trivially L)

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. 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 (3.27 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

The **right kidney** is normal size (3.23 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

Adrenal Glands

The **left adrenal gland** is normal size (0.51 cm at cranial pole) (0.51 cm at caudal pole; 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 (0.49 cm at cranial pole) (0.48 cm at caudal pole); 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 normal in size (1.14 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 normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative, or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed.

The **gall bladder** lumen is moderately distended. The wall is thin and smooth. Luminal contents are anechoic. The cystic and common bile ducts are normal/not seen.

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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 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. A 1.14 cm mesenteric **lymph node** is visualized. The node is normal in shape and echogenicity.

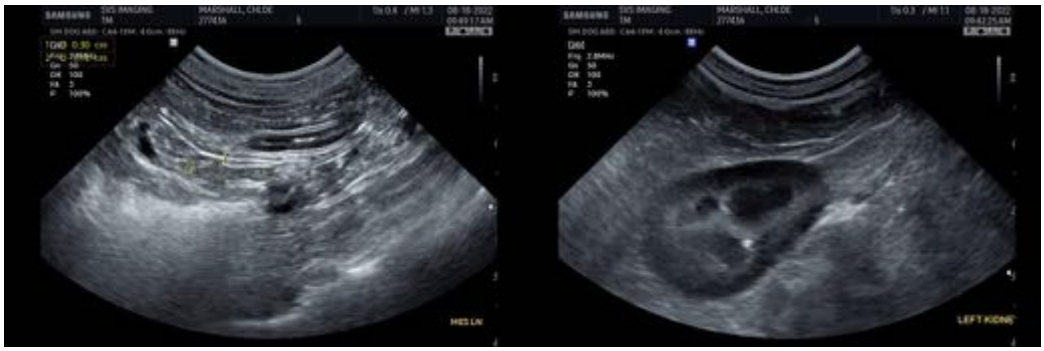
ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Essentially unremarkable abdomen. An obvious cause for the elevated liver enzymes is not identified in the study. However, a microscopic hepatopathy (i.e., bacterial cholangiohepatitis, Leptospirosis, chronic active hepatitis, copper-associated hepatotoxicity, infiltrative neoplasia (less likely)) cannot be excluded.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Pre-and postprandial serum bile acids are recommended.
- Leptospirosis testing (i.e., blood and urine PCR, serology) is also recommended.
- Consider hepatic tissue sampling (i.e., fine-needle aspirate or surgical biopsy). Hepatic cytology is best for diagnosing round cell neoplasia and vacuolar hepatopathy, but is less useful for other hepatopathies. Surgical biopsies are more likely to yield a definitive diagnosis. If pursued, consider acquisition of additional hepatic tissue samples for potential copper quantitation along with aerobic and anaerobic bile cultures. Clotting times (i.e., PT/PTT) should be performed prior to any hepatic tissue sampling.
- If a conservative approach is desired, consider empirical treatment for bacterial cholangiohepatitis (amoxicillin-clavulanic acid, +/-metronidazole, Denamarin, Ursodiol). If no improvement in the liver values is seen within 7-10 days of initiating therapy, antibiotics should be discontinued, and hepatic tissue sampling reconsidered. If liver values improve, continue therapy for at least 4-6 weeks and 1 week beyond normalization of the liver values.



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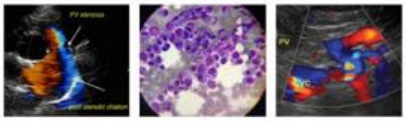
svsimagingqc.net 309-737-3070

SVS IMAGING



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Clinical Sonography & Telecytology
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1-800-838-4268 info@sonopath.com SonoPath.com

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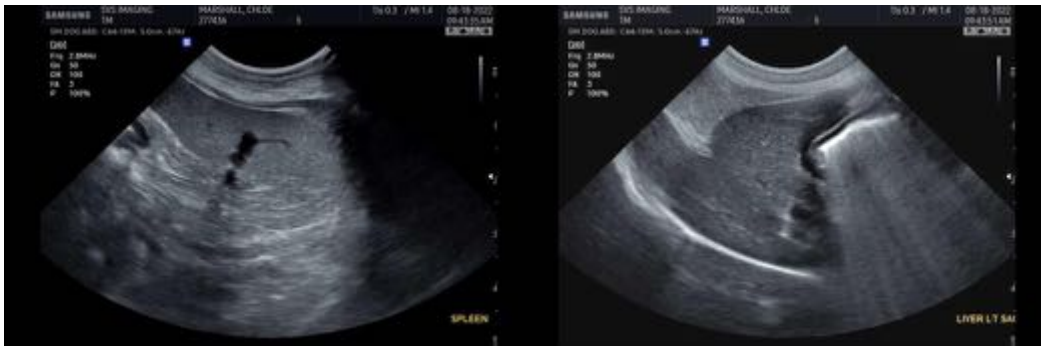

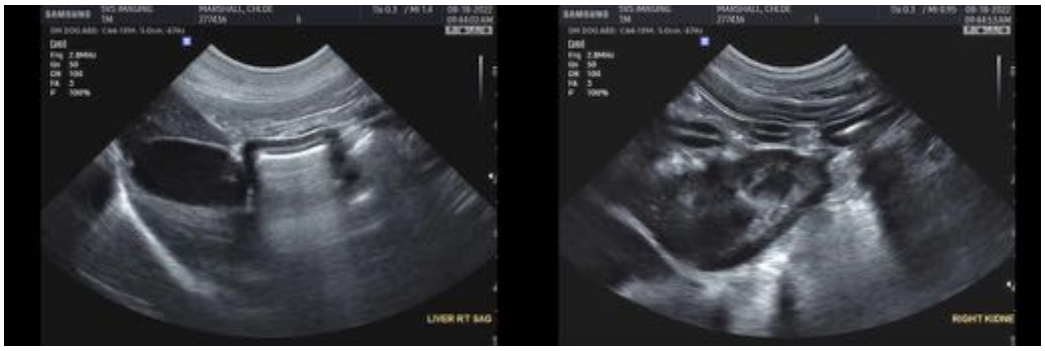

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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