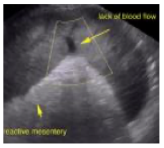
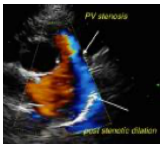
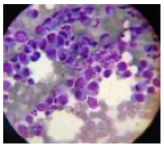
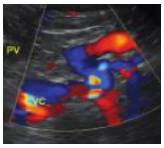
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT
Louie Tomlinson

SPECIES
Canine

BREED
Standard Poodle

SEX
Neutered Male

AGE
5 years

WEIGHT
22.48 kg

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

IMAGING PERFORMED BY
Erin Wicks

HOSPITAL NAME
Shores Vet Emerg Ctr

REFERRING VET
Dr. Moser

INVOICE
11458

DATE
8.19.22

PRESENTING CLINICAL SIGNS

History: Presented at our hospital for possibly eating up to 950mg of carprofen. O stated housemate is on 50mg carprofen PRN. Today O could not find the pills. She then remembered finding chewed up plastic on the couch a week ago. At the time she thought it was part of a Light Saber, but the color was the same as the pill container. Liver values elevated at this visit, p was put on Denamarin, rechecked Liver values at day 10 of meds and values are higher.
Previous Health Concerns: previous FB surgery (socks)

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. The cystourethral junction and the visible portion of the proximal urethra are normal.

The region of the **prostate** is not visualized due to its pelvic location.

The **left kidney** is normal size (6.77 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. Renal vasculature is normal.

The **right kidney** is normal size (6.20 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. Renal vasculature is normal.

Adrenal Glands

The **left adrenal gland** is normal size (0.46 cm at cranial pole) (0.49 cm at caudal pole) (2.41 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 (1.29 cm at cranial pole) (0.56 cm at caudal pole) (2.29 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

The **spleen** is normal in size (1.68 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. A 1.18 cm hypoechoic nodule with small cavitated areas is observed at the caudolateral aspect. In addition, a hypoechoic to heterogenous, slightly cavitated nodule, measuring 1.13 cm is also observed at the craniolateral aspect. The lesion causes capsular expansion. 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** is of normal contours and contains some dependent echogenic debris. The wall is normal in thickness. No cholelithes are observed. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The **gastric lumen** is mildly distended with ingesta. The gastric wall is normal in thickness with a normal layering pattern. 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. The abdominal **lymph nodes** are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The splenic nodules could be consistent with emerging tumors (i.e., hemangioma, hemangiosarcoma). Alternatively, benign cystic lesions are possible.

*An obvious cause for the elevated liver enzymes is not identified in this study. It is unclear whether these elevations are associated with NSAID toxicity or if another hepatopathy (i.e., inflammatory, infectious, other) is present.

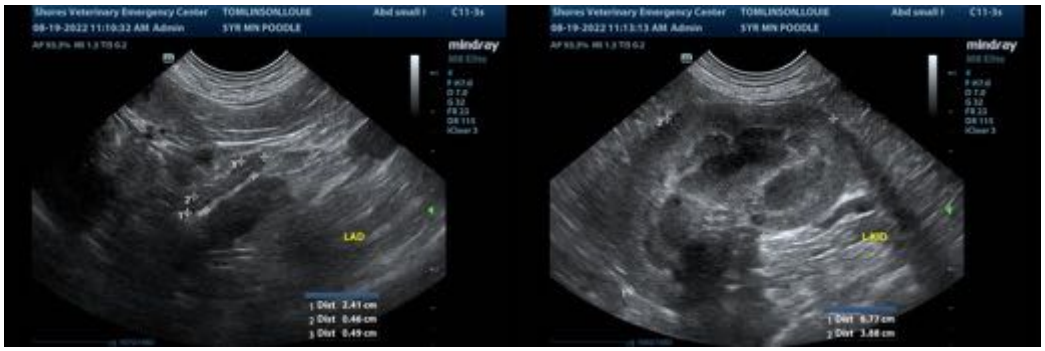
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

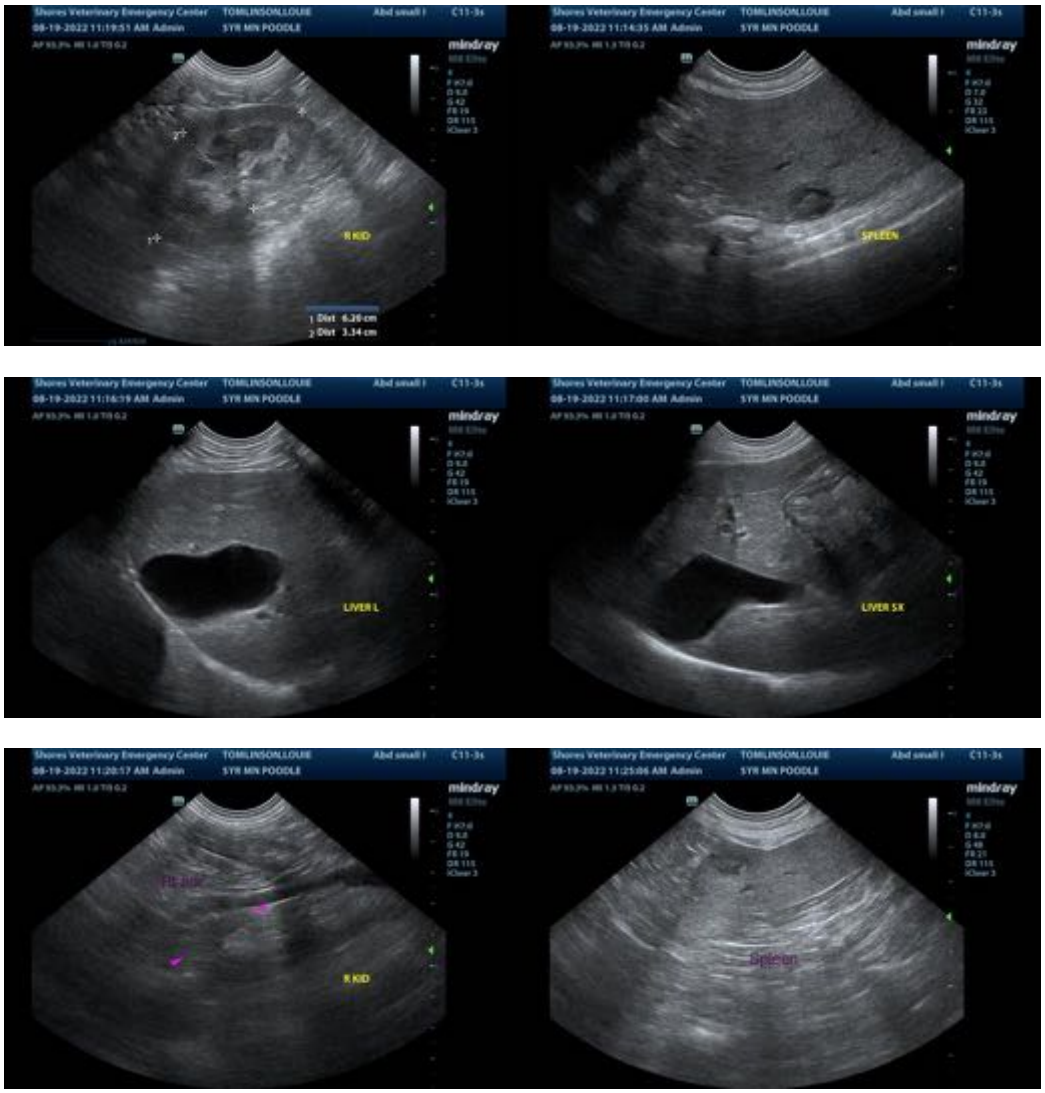
- Hepatic tissue sampling (i.e., fine-needle aspirate or surgical biopsy) should be considered. Hepatic cytology is good for evaluating for round cell neoplasia and vacuolar hepatopathy but is less useful in assessing for other hepatopathies. Surgical biopsies are more likely to yield a definitive diagnosis. With hepatotoxicosis, hepatic necrosis would be expected.

- Also consider Leptospirosis testing (i.e., blood and urine PCR, serology) as another possible cause for elevated liver enzymes.

- In the meantime, consider empirical supportive care for the history with Denamarin, Ursodiol, +/- broad-spectrum antibiotics.

- Regarding the splenic nodules, a splenectomy with histopathology can be considered.
  If surgery is not pursued, a repeat ultrasound is recommended in 4-6 weeks to assess for growth.





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