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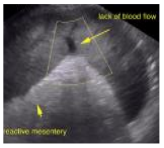
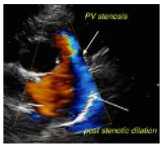
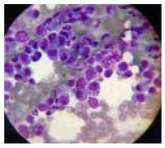
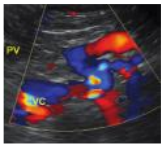
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™





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

PATIENT

Bailey Sutton

SPECIES

Canine

BREED

English Shepherd

SEX

Spayed Female

AGE

4 years

WEIGHT

92 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Couser

HOSPITAL NAME

Williamette VH

REFERRING VET

Dr. Couser

INVOICE

11111

DATE

6/20/22

PRESENTING CLINICAL SIGNS

History: Presented 6/18 for 2-day duration vomiting, diarrhea, & anorexia. No food changes and no fish exposure. Febrile on presentation, 104.1*F.

Abnormal PE/Chem/CBC/UA Results: 6/18 PM CBC: HCT 38.8%, Neu 4.1k with suspected bands, Monocytosis 2.65k, Plt 151k (low normal) Chem 17: Glob 5.7, ALT 421, ALP 466, GGT 0, Tbili 0.7 (wnl), Chol 401, rest wnl. Lepto Witness test = negative Vcheck CPL = 63.5 (normal) Fecal direct = neg (no fluke ova seen) Fecal comprehensive = pending 6/19 Recheck Chem10: Glu 199, Glob 4.9, ALT 464, ALKP 314 Ate a small amount of baby food mid-day. Fever resolved. Ongoing diarrhea. Chest rads unremarkable. Exam: Morbidly obese. MM pink, moist. Peripheral LNN wnl. Normothermic. Abdominal palpation & thoracic auscultation severely limited by body condition. Leaking brown liquid diarrhea, no blood noted.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is distended. The wall is normal in thickness with a smooth mucosal surface. A 0.63 cm cystic calculus is observed within the lumen. The remaining luminal contents are mostly anechoic. The region of the trigone and the visible portion of the proximal urethra are normal.

The left kidney is normal size (7.76 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 (7.37 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 caudal pole of the left adrenal gland is visualized and is normal size (0.70 cm in width); normal shape, glandular echogenicity and detail. The phrenicoabdominal vein and surrounding vasculature are normal.

The region of the right adrenal gland is evaluated. No obvious pathology is observed.

Spleen

The spleen is normal in size (2.60 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 enlarged with slightly swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely homogeneous in appearance. No distinct focal lesions are observed. Vascular 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 amount of aggregated echogenic partially dependent debris is observed within the lumen. The cystic and common bile ducts are normal/not seen. The portal vein to caudal vena cava ratio is approximately 1: 1.

The gall bladder lumen is moderately distended. The wall is thin and smooth. A moderate amount of aggregated, echogenic, partially dependent debris/sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The gastric lumen is mildly distended with ingesta. 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 segmentally fluid-distended (mild) and appears hypomotile in these regions. The small intestinal wall is normal in thickness 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 few, prominent, mesentery lymph nodes are visualized, the largest measuring 5.03 cm in length.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Nonspecific, diffuse hepatopathy. Top differentials include inflammatory disease (i.e., bacterial cholangiohepatitis, chronic active hepatitis), hepatotoxicosis (i.e., copper), Leptospirosis or other infectious disease, infiltrative neoplasia (lymphoma), reactive hepatopathy, other.

- Small, cystic calculus

Secondary Findings

- The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Consider further testing for Leptospirosis (i.e., urine/blood PCR), repeat serology in 10-14 days

Pre-and postprandial serum bile acids are also recommended to assess hepatic function. Consider hepatic tissue sampling (i.e., fine-needle aspirate or surgical biopsy). Surgical biopsies are preferred in that they are more likely to represent global organ pathology. Cytology is best for evaluating for lymphoma and vacuolar hepatopathy, but not as useful for other hepatopathies. If surgical biopsies are pursued, aerobic and anaerobic bile cultures are recommended, along with acquisition of additional hepatic tissue samples for potential copper quantitation. Clotting times are recommended prior to any tissue sample. Thoracic radiographs should also be considered prior to anesthesia.

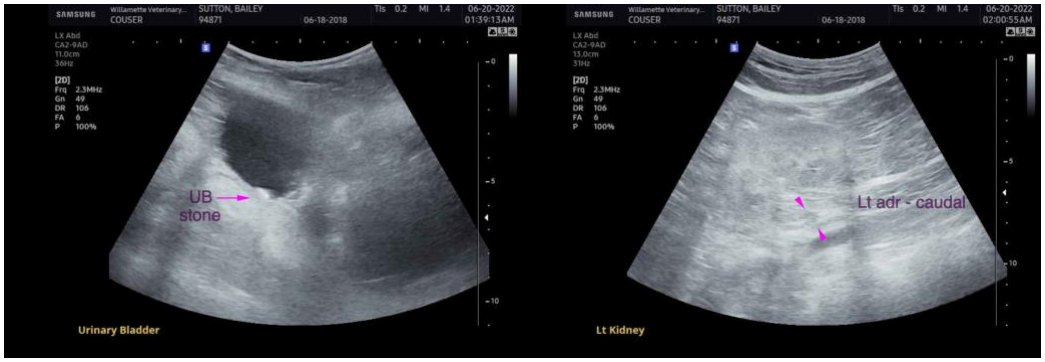
In the meantime, consider empirical treatment for bacterial cholangiohepatitis/Leptospirosis (amoxicillin-clavulanic acid, +/-metronidazole, Denamarin). If no improvement in the liver values is seen within 7-10 days of initiating therapy, antibiotics should be discontinued, and hepatic tissue sampling reconsidered. If

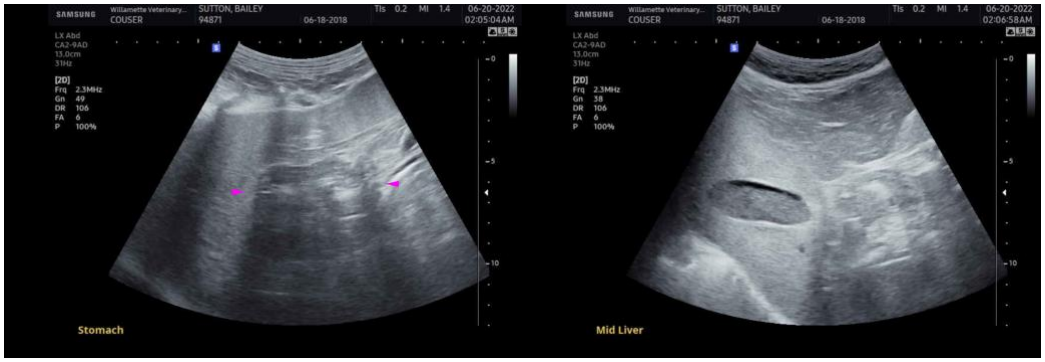
liver values improve, continue therapy for at least 4-6 weeks and 1 week beyond normalization of the liver values.

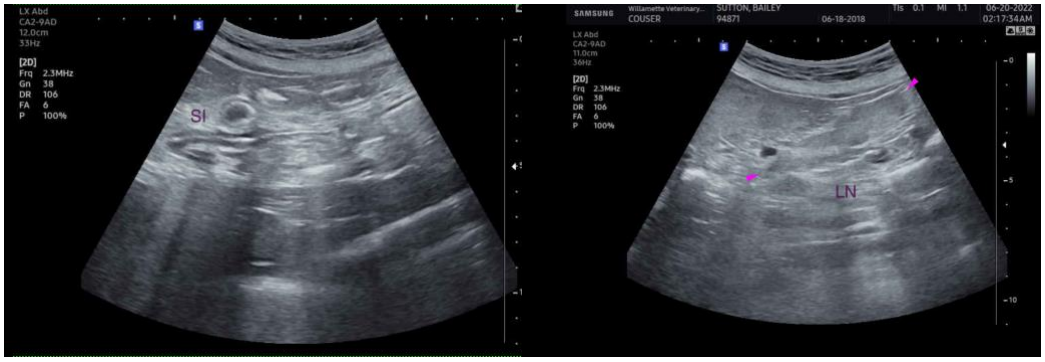
Also consider empirical treatment for *Neorickettsia helminthoeca* (i.e., doxycycline).

While awaiting comprehensive fecal panel, prophylactic deworming with fenbendazole should also be considered.

Once the patient is stabilized, consider addressing the cystic calculus (i.e., an attempt at medical dissolution or a cystotomy with stone removal analysis and culture). If surgical liver biopsies are pursued, a cystotomy can be performed concurrently. An abdominal radiograph would be useful prior to surgery to ensure that the stone is still present within the urinary bladder.







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