


PATIENT

Ella Mueller

PRESENTING CLINICAL SIGNS

History: vomiting, lethargy, diarrhea started Saturday. on IV fluids at emerg hospital over weekend. no further vomiting but still not herself currently on omeprazole, fortiflora,
 Abnormal PE/Chem/CBC/UA Results: elevated ALT, bilirubin

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
Urinary System
BREED

Border collie mix

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended. A mild to moderate amount of suspended echogenic debris is observed within the lumen. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

SEX

Female, spayed

The left kidney is normal size (5.04 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 hydronephrosis. Renal vasculature is normal.

AGE

1 Yr.

The right kidney is normal size (5.56 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 hydronephrosis. Renal vasculature is normal.

WEIGHT

14.5 kg.

Adrenal Glands

The left adrenal gland is normal size (0.38 cm at cranial pole) (0.42 cm at caudal pole) (2.54 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 (0.83 cm at cranial pole) (0.34 cm at caudal pole) (1.86 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.

INTERPRETED BY

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

IMAGING PERFORMED BY

Kelly Reshny, RVT

Spleen

The spleen is normal in size (1.77 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.

HOSPITAL NAME

Nelson AH

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

Ella Mueller

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 segmentally dilated with chyme. 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. No obstructive disease is noted.

SPECIES

Canine

Pancreas
BREED

Border collie mix

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.

SEX

Female, spayed

Free Abdomen

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. Several prominent jejunal lymph nodes are visualized, the largest measuring 2.02 cm in length.

AGE

1 Yr.

ULTRASONOGRAPHIC FINDINGS
WEIGHT

14.5 kg.

- The lymph node changes are most consistent with reactive lymphadenitis or lymphoid hyperplasia.
- Urinary bladder debris.

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*An obvious cause for the patient's clinical signs and elevated liver values is not identified in this study. Considerations include infectious/inflammatory hepatopathy, hepatotoxicity, other.

**IMAGING
 PERFORMED BY**

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Leptospirosis testing (i.e., blood and urine PCR, serology) is recommended.
- Cytologic evaluation of the liver should be considered in this patient if clotting status is appropriate. A fine needle aspirate using a 25-gauge needle is recommended. If cytologic evaluation is inconclusive, consider a surgical liver biopsy with aerobic and anaerobic bile cultures and acquisition of additional hepatic tissue samples for copper quantitation.
- If a conservative approach is desired, consider empirical treatment for bacterial cholangiohepatitis/Leptospirosis/hepatotoxicity (amoxicillin-clavulanic acid, Denamarin, supportive care). If no improvement in the liver values is seen within 5-7 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, given the history of vomiting, consider three-view thoracic radiographs to assess for occult aspiration pneumonia.

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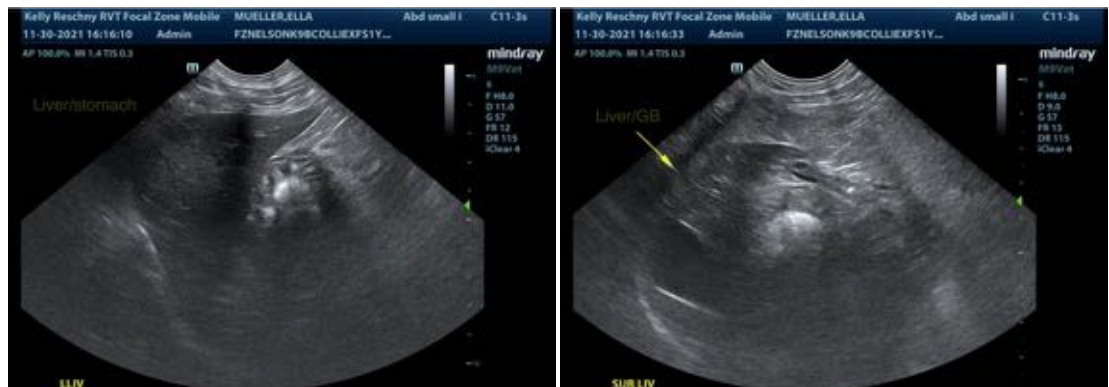
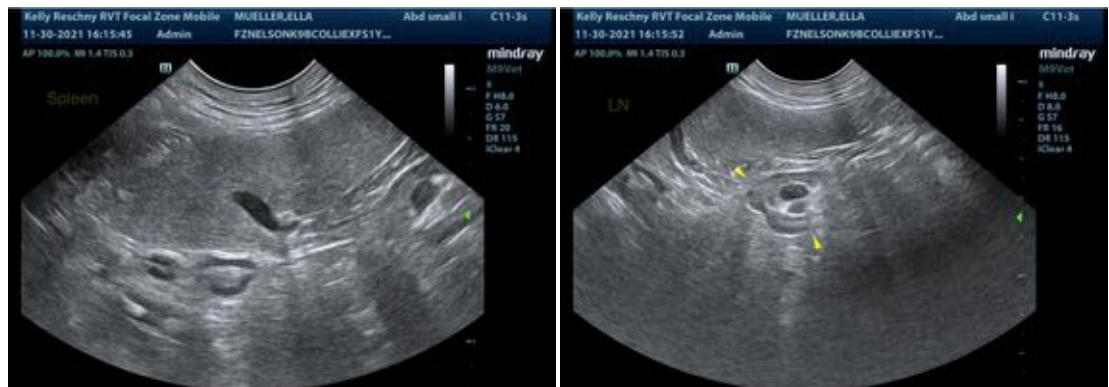
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

SPECIES

Canine

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.

BREED

Border collie mix

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

Andrea.nicastro@sonopath.com

SEX

Female, spayed

AGE

1 Yr.

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