



PATIENT PRESENTING CLINICAL SIGNS

Winnie Augur History: cholangiohepatitis, possible pancreatitis, possible back disease, and historical hypothyroid disease

SPECIES Abnormal PE/Chem/CBC/UA Results

Canine ALT: 161
ALP: 438
GGT: 29

BREED Cholesterol: 357
Albumin: 4.7

Maltipoo Forty-eight still images and 10 video clips are available for interpretation.

SEX ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Spayed Female **Urinary System**

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with mostly anechoic urine. No masses, inflammatory changes or calculi are observed. The region of the trigone is normal.

AGE

13 years The left kidney is normal in size (4.47 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

WEIGHT

6.05 kg The right kidney is normal in size (4.39 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

INTERPRETED BY

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

Adrenal Glands

The left adrenal gland is enlarged at the cranial pole (0.89 cm) and normal in size at the caudal pole (0.46 cm) with a slightly irregular shape. There is mild loss of glandular echogenicity and detail at the cranial aspect. Glandular echogenicity and detail at the caudal aspect are normal. Surrounding vasculature are normal.

IMAGING PERFORMED BY

Dr. Arias

No images provided of the right adrenal gland.

Spleen

The spleen is subjectively normal in size (1.20 cm in width at the level of the hilus) with a slight swelling of the medial contour in the region of the hilus. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

HOSPITAL NAME

Animal EH Deland

Liver

The liver is subjectively prominent in size with slightly swollen peripheral contours. The parenchyma is hypoechoic to isoechoic relative to the spleen and diffusely mottled in appearance. No distinct focal lesions are observed. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

REFERRING VET

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The gall bladder lumen is distended. The wall is normal in thickness. A moderate amount of aggregated, echogenic, partially dependent sludge is observed within the lumen. Luminal contents are anechoic. The cystic and common bile ducts are normal/not seen.

DATE

2.28.23

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



PATIENT

Winnie Augur

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.

SPECIES

Canine

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.

BREED

Maltipoo

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

SEX

Spayed Female

Primary Findings

- The gall bladder changes are concerning for an emerging mucocele.
- Diffuse hepatopathy. Differentials include regenerative nodular hyperplasia, inflammatory disease (i.e., chronic hepatitis, bacterial cholangiohepatitis), hepatotoxicosis (i.e., copper), Leptospirosis, fibrosis, other hepatopathy.

AGE

13 years

Secondary Findings

- Mild left adrenomegaly (The right adrenal gland is not visualized in the available images).
- The swelling in the medial aspect of the spleen may be a normal variant for this patient or may represent a benign process (i.e., lymphoid hyperplasia, extramedullary hematopoiesis, or similar), or less likely, an emerging tumor.

WEIGHT

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Given the sonographic liver changes and the patient's clinical history, consider the following:
 1. Pre-and postprandial serum bile acids
 2. Leptospirosis testing (i.e., blood and urine PCR, serology)
 3. +/- hepatic tissue sampling (i.e., fine-needle aspirate or biopsies). If biopsies are pursued, aerobic and anaerobic bile cultures should be obtained, and hepatic copper quantitation performed. Clotting times should be performed prior to hepatic tissue sampling. Thoracic radiographs are recommended prior to any anesthetic event.

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SPECIES

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SEX

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AGE

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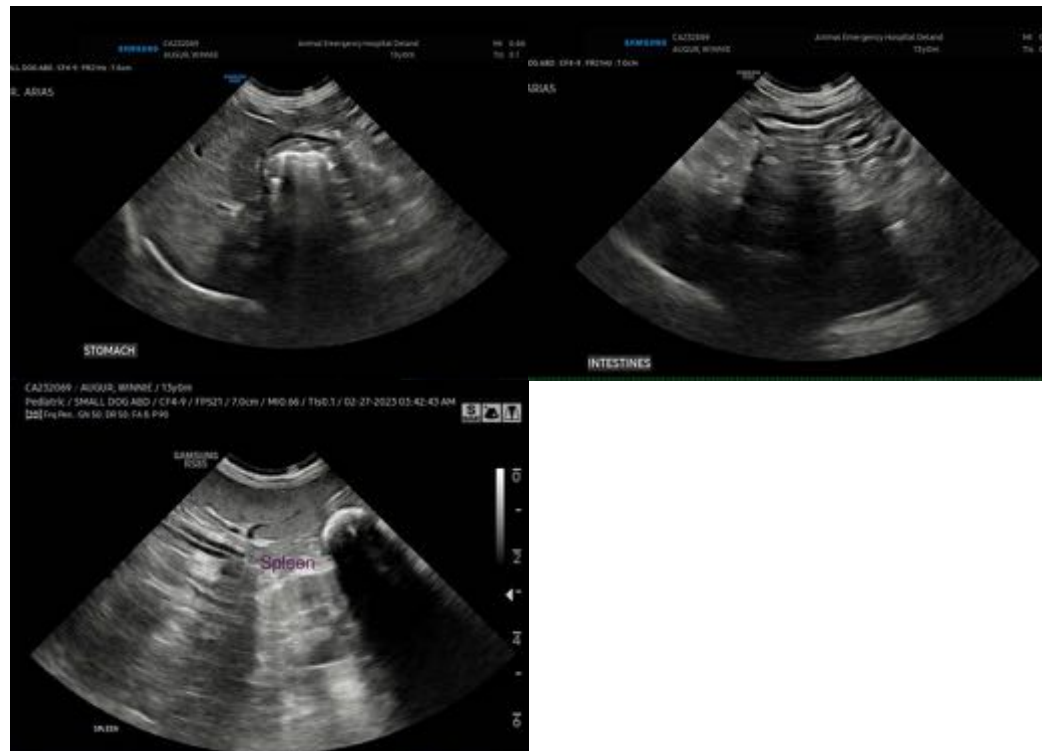
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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