



PATIENT PRESENTING CLINICAL SIGNS

Stella McBreen Vomiting, lethargy, severe acute elevated liver enzymes.
Medication: Cerenia

SPECIES WBC 10.5 with mild lymphopenia, ALP 2616, ALT 2417, Spec cPL 37, BUN 28, Creatinine 1.0
Canine

BREED ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Australian Terrier *Urinary System*
The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

SEX FS
The area of the aortic trifurcation was free of pathology.

AGE 2011
Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation or pyelectasia was present. The left kidney measured 5.5 cm in length. The right kidney measured 5.1 cm in length.

WEIGHT 19.6

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 2.1 cm length x 0.66 cm width at the caudal pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 2.2 cm length x 0.54 cm width at the caudal pole.

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)

Spleen

The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

IMAGING PERFORMED BY
Rebekah Jakum, CVT
ARDMS/RVT

HOSPITAL NAME

Alburtis AH

Liver/ Gallbladder

The liver was mildly enlarged yet maintained a symmetrical capsule contour with normal to mild variable hepatic parenchyma echogenicity exhibiting mild to moderate coarse echotexture. No hepatic masses or nodules were noted. The gallbladder was non-distended with mildly prominent to hyperechoic gallbladder walls containing anechoic content with moderate, non-dependent, congealed, mildly organized, nonmineralized luminal debris. Subtle evidence of pericholecystic hyperechoic omentum was noted. No evidence of associated pericholecystic free fluid was noted. The common bile duct was normal.

REFERRING VET

Dr. Smith

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DATE

11/23/22



PATIENT *Gastrointestinal*

Stella McBreen The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction, or foreign material.

SPECIES The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction, or foreign material.

Canine Normal visible colon wall layers were present with apparent formed feces in lumen.

BREED *Pancreas*

Australian Terrier The parenchyma of the pancreas was hyperechoic to adjacent omental fat with diffuse parenchyma remodeling. The capsule of the pancreas was mildly asymmetrical in contour without evidence of peripancreatic inflammation. These changes may suggest chronic inflammation, fibrosis, or saponification if previous history of pancreatitis. No overt signs of pancreatic neoplasia.

SEX
 FS

Free Abdomen

AGE No omental masses, lymphadenopathy, or evidence of peritoneal free fluid were noted.

2011

ULTRASONOGRAPHIC FINDINGS

WEIGHT *Primary Findings*

19.6

- Hepatopathy - suspect acute on chronic hepatopathy, inflammatory hepatopathy, vacuolar hepatopathy, cholestasis, less likely infiltrative neoplasia possible
- Gallbladder mucocele, subtle evidence of peripheral inflammation
- Chronic pancreatitis pattern, potential for pancreatic fibrosis
- Mild gastroduodenitis

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Secondary Findings

- Mild chronic renal changes

IMAGING PERFORMED BY
 Rebekah Jakum, CVT
 ARDMS/RVT

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

HOSPITAL NAME

Alburtis AH

No overt evidence of hepatobiliary neoplastic criteria. Assessment of GGT and total bilirubin levels for further clarification of degree of cholestasis is recommended, especially if evidence of icterus. Assessment for evidence of cranial abdominal or subxiphoid discomfort (positive Murphy's Signs) in the area of the subxiphoid to cranial abdomen associated with the gallbladder is recommended.

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Empirically, some or all of the following protocol with as-needed GI support and close monitoring for hepatic response vs. progressive hepatic enzyme elevations or cholestasis could be considered. Leptospirosis titers / PCR is recommended if clinically indicated.

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Depending upon the patient clinical status and response to conservative therapy, assuming normal clotting status, cholecystectomy with hepatic biopsies may ultimately be indicated.

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Assessment of T4 levels is suggested. Primary adrenal disease is considered less likely, given the lack of reported clinical signs i.e., PU/PD, polyphagia, etc.



PATIENT

Stella McBreen

Enrofloxacin 5 mg/kg SID PO & **Metronidazole** (10-20 mg/kg po bid) over 3 weeks, **Ursodiol** (10-15 mg/kg p.o. q24h) over 8 weeks and recheck sonogram. Monitor rapid rise in ALT, SAP, Bilirubin, bilirubinuria, leukocytosis, focal cranial abdominal subxyphoid discomfort or progressive anorexia.

SPECIES

Canine

More information regarding clinical emerging mucocele issues may be found with our article and research at <http://sonopath.com/resources/articles>, **Defining a GB Mucocele** and **Clinical Parameters in Dogs with Sonographically Diagnosed Surgical Biliary Disease** from ECVIM 2009.

BREED

Australian Terrier

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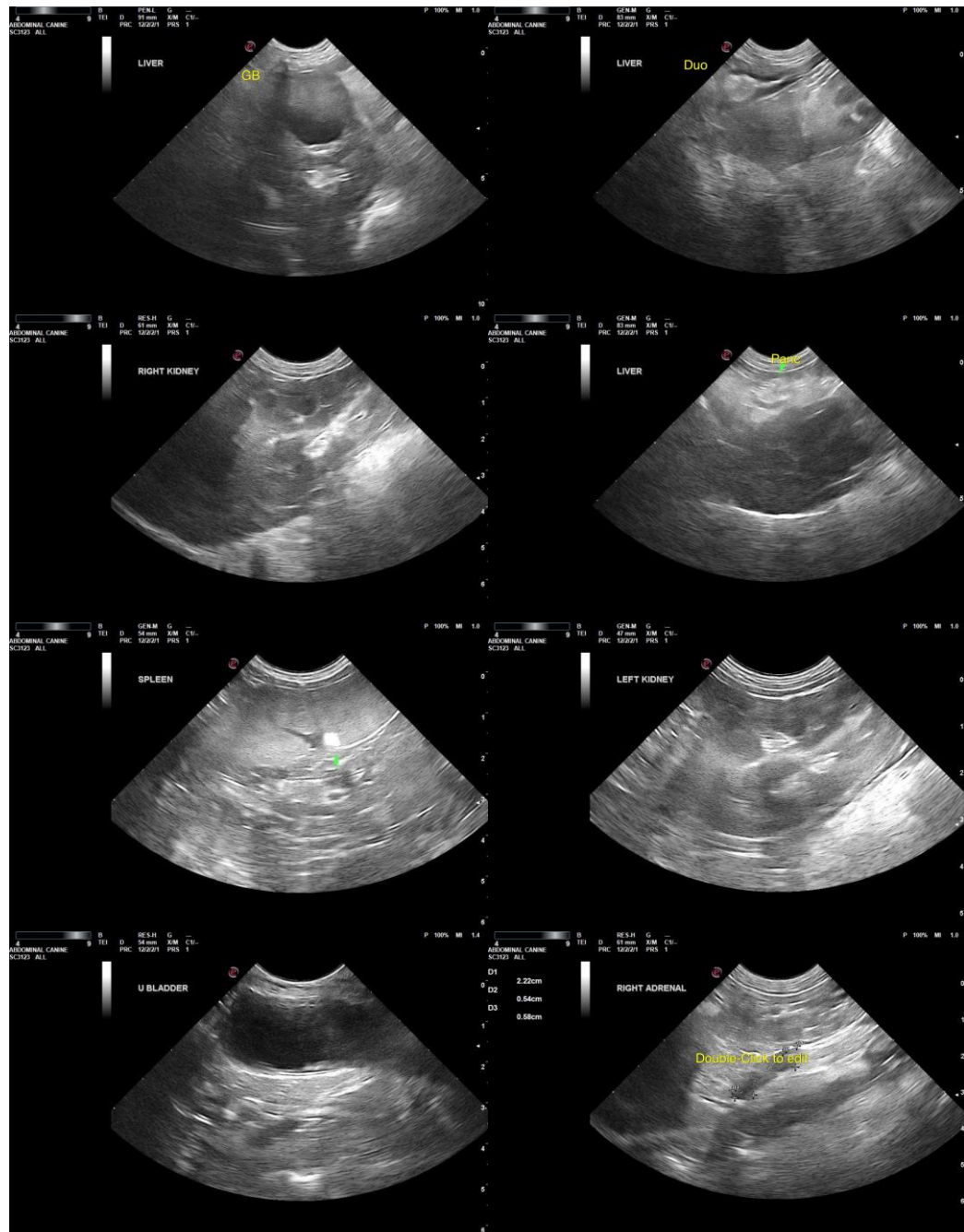
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SPECIES

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Australian Terrier

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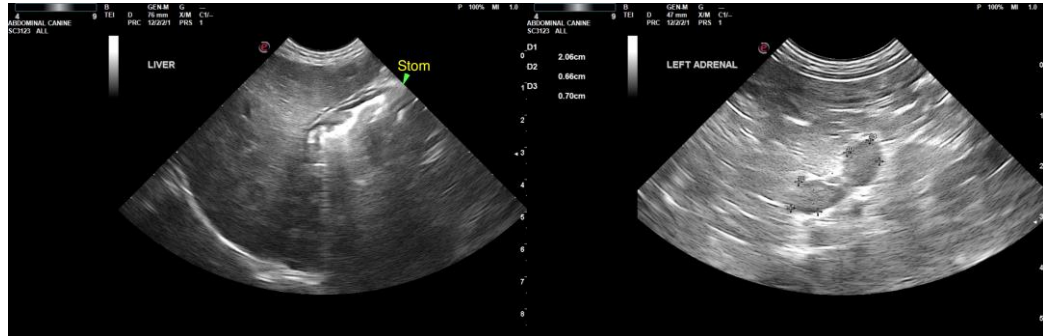
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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