



PATIENT

Doppler Balfour

SPECIES

Canine

BREED

Australian Shepherd

SEX

MN

AGE

13 years

WEIGHT

36 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Sara Hansen

HOSPITAL NAME

VCA Delta Oaks

REFERRING VET

Dr. Garretson

INVOICE

17107

DATE

6/20/23

PRESENTING CLINICAL SIGNS

History of Addison's - previously well-controlled on Zycortal 1.5mg/kg Q28 days and 2.5 prednisone PO Q24hrs P originally presented May 30th for gastroenteritis

Bloodwork azotemia, hyperphosphatemia and Na/K = 27 - P responded to supportive care, increased Zycortal dose (2mg/kg) and increase prednisone dose (5mg PO Q24hrs) P presented June 8th for recheck bw - azotemia resolved, mild ALT, ALKP elevation, Na/K = 32

O reported decreased appetite Jun 12th - responded to injectable Cerenia for 24 hours O called June 14th about signs of nausea (no vomiting) - Rx oral cerenia O presented P today (June 16th) for decreased appetite (no v/d, normal energy level) - mild dehydration - gave 400ml LRS SQ - in house bw: mild azotemia, ALT increased to 221, ALKP increased 556, Na/K =27 - repeat Cerenia injection and refill oral Cerenia - Antech IM consult suspect something other than Addison's att Abnormal PE/Chem/CBC/UA Results: ABNORMAL Laboratory Findings see above

Current Medications Zycortal 2mg/kg every 28 days (last inj May 31st), 5mg prednisone PO q24hrs
Radiographic Findings May 30th: Radiologist report - GI appearance consistent with colitis, hepatomegaly

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder presented uniformly thickened urinary bladder wall isoechoic to the adjacent normal urinary bladder wall. The luminal margin of the thickened urinary bladder wall was mildly asymmetrical in contour. Mineralization or echogenic foci within the thickened areas of urinary bladder wall was not present. The urinary bladder, trigone, and cystourethral junction exhibited normal tone. Anechoic urine was present in the lumen with no sediment, mineral, or calculi. The ureteral papillae were normal. The ureters were not visible which is normal. The ventroapical urinary bladder wall thickness measured 0.55 cm.

No overt pathology was noted in the area of the residual prostate, although not definitively visualized.

No evidence of medial Iliac or sublumbar lymphadenopathy/masses.

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 was present. Small cortical cysts as well as pinpoint to focal areas of corticomedullary mineralization were noted in both kidneys. The left kidney measured 6.1 cm in length. The right kidney measured 6.1 cm in length.

Adrenal Glands

The left and right adrenal glands were not definitively visualized owing to hypoadrenocorticism and concurrent therapy.



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Spleen

The spleen was normal in size with minor capsule asymmetry. Subtle generalized splenic parenchyma heterogeneity was noted with intermittent, nondisruptive, nonhomogeneous, hyperechoic splenic nodules. An example of a nodule measured 1.3 cm diameter. The nodules did not distort the splenic capsule. No evidence of splenic masses was visualized.

Liver/ Gallbladder

The liver was enlarged with asymmetrical hepatic capsule contour and non-uniform, diffusely nodular hepatic parenchyma. Irregular, indistinctly marginated, mixed echogenic to cystic, intraparenchymal mass was noted in the ventral liver measuring ~6.0 cm in diameter. An example of a liver nodule measured 1.7 cm in diameter. The gallbladder was non-distended in size exhibiting mildly thickened to hyperechoic gallbladder wall containing primarily anechoic content with minor hyperechoic gallbladder sediment. The cystic and common bile ducts were normal.

Gastrointestinal

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.

The small intestine presented generalized intact wall layering and maintained a 1:3 muscularis/mucosa ratio with subtle duodenal corrugation, indistinct duodenal mucosal speckling and mild nonobstructive duodenal ileus. The jejunum and ileum to the level of the colon were sonographically normal.

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

Pancreas

The parenchyma of the left limb, body, and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease were evident.

Free Abdomen

Moderate volume, primarily anechoic peritoneal effusion was present exhibiting subtle echogenic changes, which may suggest mild fluid cellularity. Generalized primary uniform, hyperechoic omentum was noted. No visualized omental masses or overt lymphadenopathy were noted.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Enlarged nonuniform / nodular liver with mixed echogenic to cystic liver mass
- Suspect mild chronic cholecystitis
- Intact gastrointestinal wall with possible duodenitis



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- Nonspecific variably hyperechoic splenic nodules
- Moderate peritoneal effusion

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Secondary Findings

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- Bilateral chronic renal changes
- Mild cystitis pattern

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Although sampling is required for further assessment, primary concern for diffuse hepatic neoplastic criteria with effusion secondary to portal hypertension or possible carcinomatosis, lymphomatosis, or similar, is warranted. Benign etiology for the liver, i.e., vacuolar hepatopathy, inflammatory / immune mediated disease, hyperplasia, hematopoiesis, fibrosis, etc., are possible yet thought less likely.

Further assessment may include, assuming normal clotting status, hepatic parenchyma and mass FNA cytology, as well as effusion analysis, cytology, +/- C/S, if clinically indicated.

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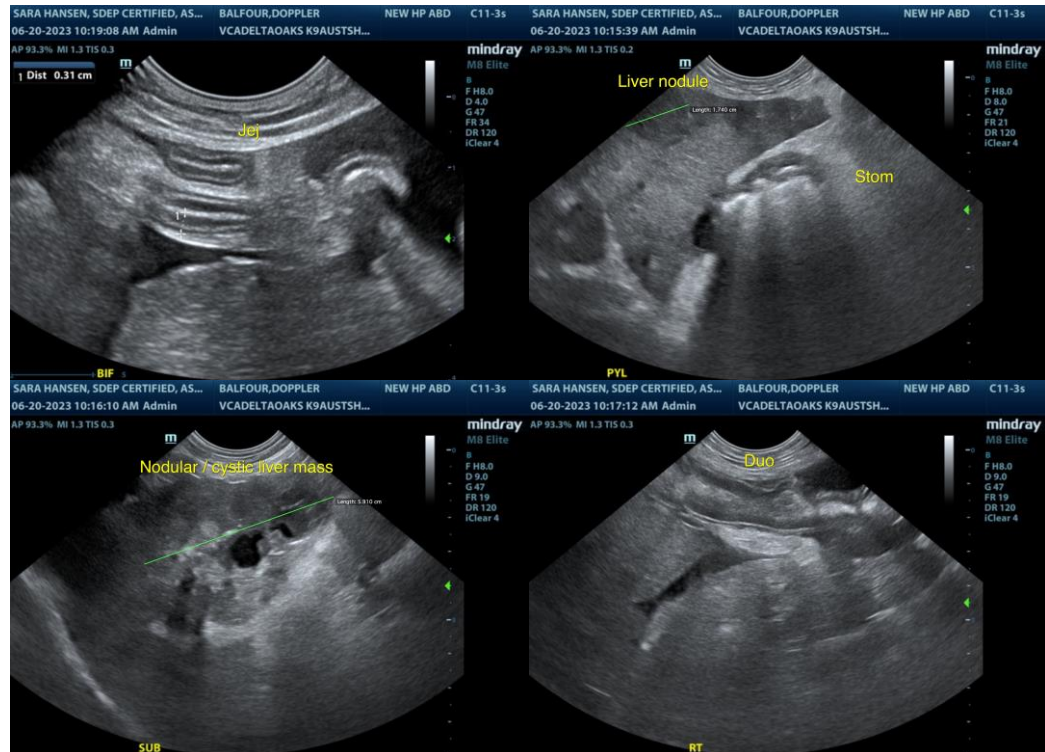
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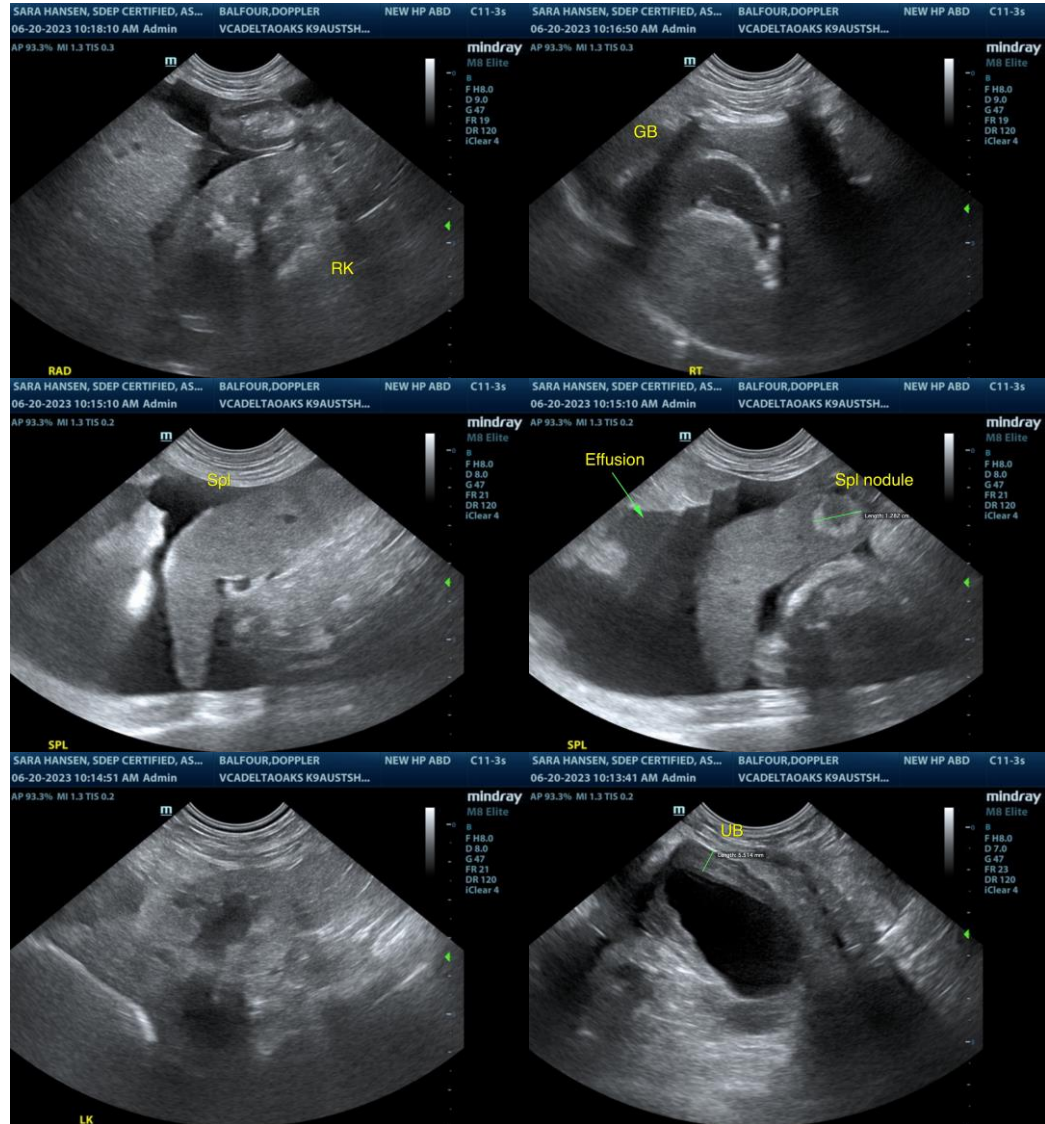
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)
info@SonoPath.com