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| <b>PATIENT</b>   | <b>PRESENTING CLINICAL SIGNS</b>   |
| Cesar Back   | Geriatric with DJD. Senior wellness BW profile found liver concerns. O requests AUS. Fasted scan. Abnormal PE/Chem/CBC/UA Results: ALT 130 (12-118) ALP 609 (5-131) Tbili 0.4 (0.1-0.3) Normal CBC K- 5.9 (3.6-5.5) Cholesterol 644 (92-324). Most fasted sample   |
| <b>SPECIES</b>   | <b>ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN</b>   |
| Canine   | <i>Urinary System</i>  |
| <b>BREED</b>   | 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 were noted.  |
| Collie   |  |
| <b>SEX</b>   | No overt pathology in the area of the residual prostate.   |
| MN   | No evidence of pathology in the area of the aortic trifurcation.   |
| <b>AGE</b>   | Normal size and margination was 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. Pinpoint areas of medullary mineral present in both kidneys. The left kidney measured 6.6 cm in length. The right kidney measured 7.3 cm in length. |
| 12 Years   |  |
| <b>WEIGHT</b>  | <i>Adrenal Glands</i>  |
| 73 lbs   | The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.67 cm width at the caudal pole and 0.58 cm width at the cranial pole.   |
| <b>INTERPRETED BY</b>                                    | The right adrenal gland was indistinctly visualized yet without overt pathology subjectively measuring 0.78 cm width at the caudal pole.   |
| R. McKenzie Daniel,<br>DVM, DABVP<br>(Canine and Feline) | <i>Spleen</i>  |
| <b>IMAGING PERFORMED BY</b>                              | The spleen exhibited normal size and contour with primarily finely textured and homogenous splenic parenchyma. A solitary nonexpansive discreet hypoechoic nodule was present in the lateral spleen measuring 0.95 cm in diameter. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis.   |
| Alex Emerson DVM   |  |
| <b>HOSPITAL NAME</b>                                     | <i>Liver / Gallbladder</i>   |
| Animal Clinic of<br>Casselberry                          | The liver presented enlarged in size. The parenchyma of the liver exhibited mild to generalized remodeling. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion.  |
| <b>REFERRING VET</b>                                     |  |
| Alex Emerson DVM   | The gallbladder was non distended in size with mild echogenic, nonmineralized gallbladder debris. The cystic duct and common bile ducts were normal without evidence of dilation.  |
| <b>INVOICE</b>   | <i>Gastrointestinal</i>  |
| 50079  | 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.   |
| <b>DATE</b>  | 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.   |
| 2-4-22   |  |



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

Cesar Back

***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 was evident.

**SPECIES**

Canine

***Free Abdomen***

**BREED**

Collie

No overt lymphadenopathy or peritoneal effusion was present.

**ULTRASONOGRAPHIC FINDINGS**

**Primary**

**SEX**

- Discreet nonspecific splenic nodule.

MN

- Mild chronic renal changes.

**AGE**

- Hepatopathy - subjectively benign.

12 Years

- Minor gallbladder - incidental.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**WEIGHT**

Although nonspecific, the discreet splenic nodule is suggestive of focal lymphoid hyperplasia or hematopoiesis. No overt evidence of neoplastic criteria, which is considered unlikely.

73 lbs

Overall appearance of the liver was nonspecific yet most consistent with benign hepatopathy. Considerations may include vacuolar hepatopathy and nonclinical cholestasis given the ALP/total bilirubin elevation with potential for primary or concurrent inflammatory parenchymal disease such as nonspecific cholangiohepatitis given the ALT elevation and presence of gallbladder debris.

**INTERPRETED BY**

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

Further assessment may include, assuming normal clotting status, hepatic FNA for screening cytology. Hepatic neoplastic considered an unlikely differential diagnosis. Sonographic monitoring of the splenic nodule warranted for evidence of progression.

**IMAGING PERFORMED BY**

Alex Emerson DVM

Empirically, hepatosupportive medications including denamarin and ursodiol may prove beneficial. Recheck sonogram with potential for hepatic or splenic nodule sampling if evidence of progressive hepatic enzyme elevations would also be a reasonable approach.

**HOSPITAL NAME**

Animal Clinic of  
Casselberry

**REFERRING VET**

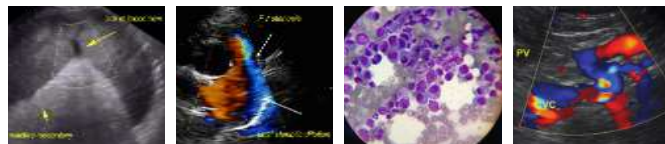
Alex Emerson DVM

**INVOICE**

50079

**DATE**

2-4-22



**PATIENT**

Cesar Back

**SPECIES**

Canine

**BREED**

Collie

**SEX**

MN

**AGE**

12 Years

**WEIGHT**

73 lbs

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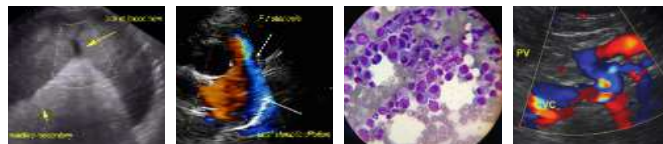
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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