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| <b>PATIENT</b>   | <b>PRESENTING CLINICAL SIGNS</b>   |
| Monty Faulkner   | Lethargic elevated liver enzymes on routine blood work   |
| <b>SPECIES</b>   | Abnormal PE/Chem/CBC/UA Results: Moderate elevation ALT and marked elevation of ALP  |
| Canine   | <b>ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN</b>   |
| <b>BREED</b>   | <i>Urinary System</i>  |
| Scottish Terrier   | The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2 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.  |
| <b>SEX</b>   | 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. A small cortical cyst present in the left kidney. Bilateral pinpoint to focal areas of medullary mineral were present. The left kidney measured 5.5 cm in length. The right kidney measured 5.3 cm in length   |
| MN   |  |
| <b>AGE</b>   | The area of the aortic trifurcation was free of pathology.   |
| 11   |  |
| <b>WEIGHT</b>  | The area of the residual prostate appeared normal and free of pathology.   |
| 13kg   | <i>Adrenal Glands</i>  |
| <b>INTERPRETED BY</b>                                    | The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.51 cm width at the caudal pole and 0.4 cm width at the cranial pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.43 cm width at the caudal pole and 0.54 cm width at the cranial pole. No evidence of adrenomegaly or tumors.  |
| R. McKenzie Daniel,<br>DVM, DABVP<br>(Canine and Feline) | <i>Spleen</i>  |
| <b>IMAGING PERFORMED BY</b>                              | The spleen exhibited primarily finely textured parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Mild generalized parenchyma heterogeneity was present without evidence of nodular changes. 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. The parenchymal heterogeneity is likely consistent with benign changes such as extramedullary hematopoiesis or age related remodeling with minor potential for inflammatory or neoplastic disease.   |
| Dr. Belan  | <i>Liver</i>   |
| <b>HOSPITAL NAME</b>                                     | The liver presented enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. 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. The gallbladder was mildly distended in size with primarily anechoic luminal content and moderate variably dependent to congealed hyperechoic luminal debris along with suspect peripheral hyperechoic mucus. Regional mildly prominent to hyperechoic gallbladder walls without evidence of peripheral gallbladder inflammation was present. Subtle dilation of the proximal common bile duct was present without evidence of post hepatic obstructive criteria. |
| Legacy Vet Clinic  | <i>Gastrointestinal</i>  |
| <b>REFERRING VET</b>                                     |  |
| Dr. Flaig  |  |
| <b>INVOICE</b>   |  |
| 12472ag  |  |
| <b>DATE</b>  |  |
| 12/19/2022   |  |



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| <b>PATIENT</b>   | 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.   |
| Monty Faulkner   |  |
| <b>SPECIES</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.   |
| Canine   | Normal visible colon wall layers were present with apparent formed feces in lumen.   |
|  | <b>Pancreas</b>  |
| <b>BREED</b>   | The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum, likely consistent with age related changes and considered incidental. No signs of active inflammation or neoplasia.   |
| Scottish Terrier   |  |
|  | <b>Free Abdomen</b>  |
| <b>SEX</b>   | No omental masses, overt lymphadenopathy or peritoneal effusion was present.   |
| MN   |  |
|  | <b>ULTRASONOGRAPHIC FINDINGS</b>   |
| <b>AGE</b>   | <ul style="list-style-type: none"> <li>Hepatopathy-nonspecific, vacuolar hepatopathy, non-obstructive cholestasis, potential for breed associated vacuolar hepatic changes given the ALP elevation or other hepatopathy possible. No overt evidence of neoplastic criteria was not present</li> <li>Early/immature gallbladder mucocele</li> <li>Mild bilateral age-related renal changes with minor medullary mineral and small left kidney cortical cyst</li> <li>Sonographically normal bilateral adrenal glands</li> </ul>   |
| 11   |  |
| <b>WEIGHT</b>  |  |
| 13kg   |  |
|  | <b>INTERPRETATION OF THE FINDINGS &amp; FURTHER RECOMMENDATIONS</b>  |
| <b>INTERPRETED BY</b>                                    | Given potential for breed associated hepatopathy, a FNA for screening cytology is warranted for further assessment assuming normal clotting status and using a 25g needle. Hepatosupportive medications such as Denamarin and Ursodiol and ideally sonograph monitoring of the liver and the gallbladder with initial recheck in 3-4 months, sooner if progressive hepatic enzyme elevations or cholestasis is suggested. No overt suspicion of Cushing's syndrome given normal adrenal appearance and patients clinical signs. Some or all of the following protocol could be considered. |
| R. McKenzie Daniel,<br>DVM, DABVP<br>(Canine and Feline) |  |
| <b>IMAGING PERFORMED BY</b>                              | <b>Enrofloxacin 5 mg/kg SID PO &amp; Metronidazole (7.5 mg/kg po bid-sick liver dose) 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 subxiphoid discomfort or progressive anorexia.</b>   |
| Dr. Belan  | More information regarding clinical emerging mucocele issues may be found with our article and research at <a href="http://sonopath.com/resources/articles">http://sonopath.com/resources/articles</a> , <b>Defining a GB Mucocele</b> and <b>Clinical Parameters in Dogs with Sonographically Diagnosed Surgical Biliary Disease</b> from ECVIM 2009.   |
| <b>HOSPITAL NAME</b>                                     |  |
| Legacy Vet Clinic  |  |
| <b>REFERRING VET</b>                                     |  |
| Dr. Flaig  |  |
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**PATIENT**

Monty Faulkner

**SPECIES**

Canine

**BREED**

Scottish Terrier

**SEX**

MN

**AGE**

11

**WEIGHT**

13kg

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Belan

**HOSPITAL NAME**

Legacy Vet Clinic

**REFERRING VET**

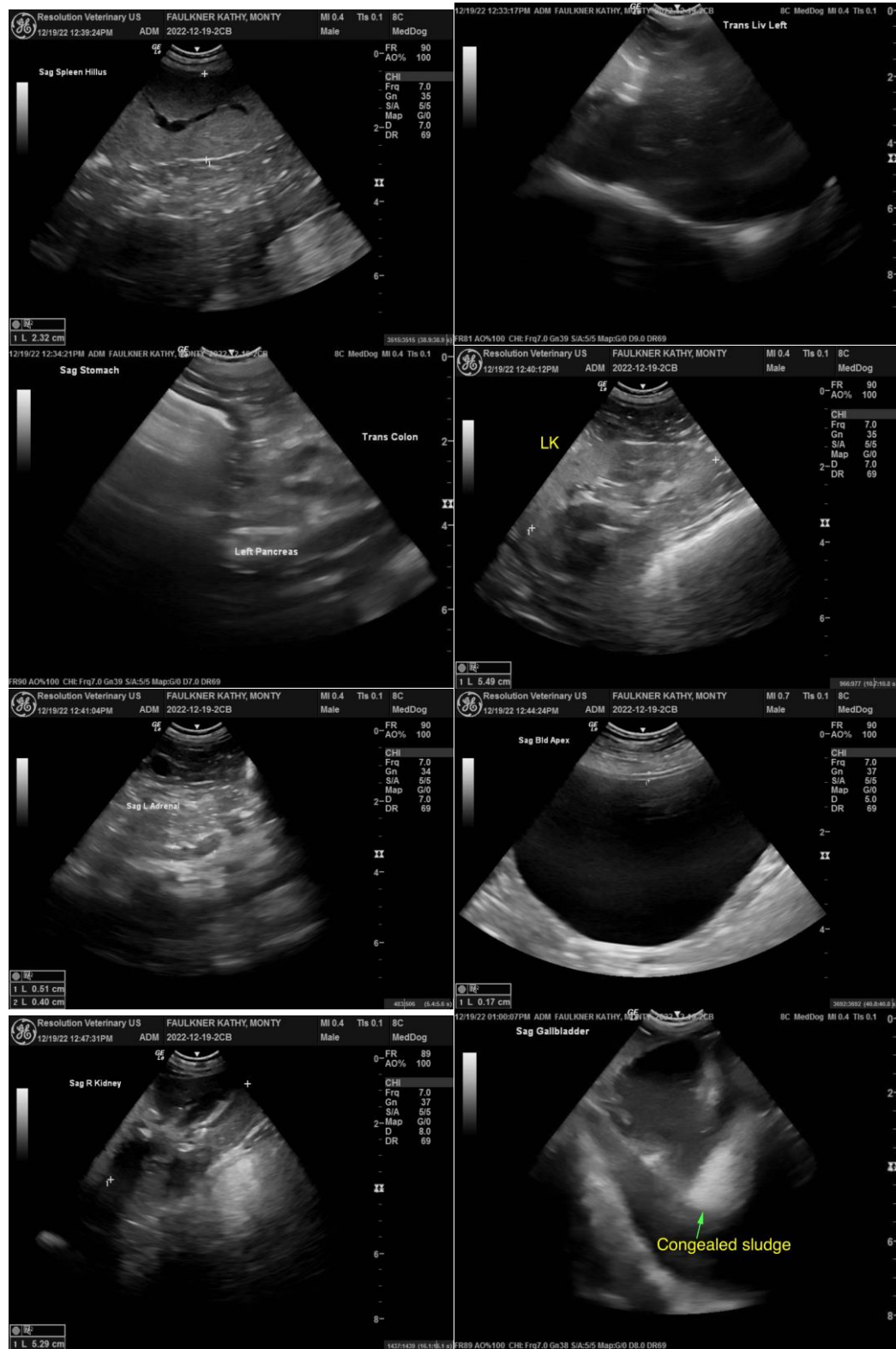
Dr. Flaig

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## PATIENT

Monty Faulkner

## SPECIES

Canine

## BREED

Scottish Terrier



## SEX

MN

## AGE

11

## WEIGHT

13kg

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Dr. Belan

## HOSPITAL NAME

Legacy Vet Clinic

## REFERRING VET

Dr. Flaig

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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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