

PATIENT PRESENTING CLINICAL SIGNS

Lilly O'Brien Increasing ALT but asymptomatic (5/2021: 128; 7/2021:238) Denamarin 225mg daily since June 2021. Abnormal PE/Chem/CBC/UA Results: ALT 238H, ALP 219H

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Canine **Urinary System**

BREED 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.

Terrier X

SEX 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 loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 4.8 cm. The right kidney measured 4.7 cm.

Spayed Female

AGE The area of the aortic trifurcation was free of pathology.

11 Years **Adrenal Glands**

WEIGHT The left adrenal gland was enlarged in size, measuring 2.6 cm length x 1.1 cm at the cranial pole and 1.6 cm at the caudal pole. No evidence of parenchymal mineralization or overt vascular invasion. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia.

16 Pounds

INTERPRETED BY The right adrenal gland was normal in size, measuring 0.41 cm at the cranial pole and 0.46 cm at the caudal pole. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia.

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

IMAGING PERFORMED BY **Spleen**
 The spleen exhibited primarily finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Intermittent, multifocal, well-defined, symmetrical, echogenic nodules were present throughout the cranial to caudal 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 or neoplastic changes were not noted. The echogenic nodules tend to trend benign and are most consistent with benign hyperplasia or myelolipomas.

Pamela Harrigan, RDCS

HOSPITAL NAME

Falmouth AH

REFERRING VET **Liver**
 The liver was mildly enlarged in size. The parenchyma of the liver was increased in echogenicity compared to the spleen and renal cortices with nonuniform to patchy echotexture. Reduced distinction and visualization of the portal structures was present. The gallbladder was non distended in size with mild to moderate, dependent to non-dependent, non-organized, echogenic debris. The cystic duct and common bile ducts were normal without evidence of dilation.

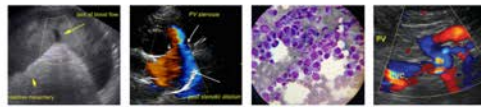
Dr. Lilan Hauser

INVOICE **Gastrointestinal**

26296

DATE 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. Gastric body wall measured 0.45 cm.

10/14/21



PATIENT

Lilly O'Brien

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. Duodenum wall measured 0.36 cm. Jejunum wall measured 0.35 cm.

SPECIES

Canine

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

Pancreas

BREED

Terrier X

The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.

SEX

Spayed Female

- Mild hepatomegaly with non-uniform parenchyma
- Mild to moderate gallbladder debris (non-mucocele)
- Enlarged left adrenal gland
- Heterogeneous pancreas
- Bilateral mild chronic renal changes

AGE

11 Years

ULTRASONOGRAPHIC FINDINGS

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

WEIGHT

16 Pounds

The presentation of the liver may indicate vacuolar hepatitis, chronic active hepatitis, cholangiohepatitis, early fibrosis / cirrhosis or other hepatopathy with potential for neoplasia. Inflammatory hepatic parenchymal or hepatobiliary process is favored given the primarily elevated ALT and presence of gallbladder debris, which may also indicate non-clinical cholestasis. The enlarged left adrenal is non-specific with potential considerations including benign hyperplasia, adenomatous change, or emerging neoplasia such as pheochromocytoma. Potential for neoplasia is of concern, although not definitive. Screening blood pressure is advised.

INTERPRETED BY

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

Cortisol secreting tumor is considered unlikely given the lack of clinical signs suggestive of hyperadrenocorticism. The appearance of the pancreas is suggestive of age related pancreatic changes and likely incidental. Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered. Ultrasound guided FNA of the liver (assuming normal clotting status) may be considered for screening cytology. The addition of Ursodiol to current Denamarin is suggested. Sonographic reassessment of the left adrenal gland in 4 weeks for evidence of progressive enlargement is suggested. Potential for laparotomy, left adrenalectomy and hepatic biopsy would be a more aggressive approach.

IMAGING PERFORMED BY

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Dr. Lilan Hauser

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PATIENT

Lilly O'Brien

SPECIES

Canine

BREED

Terrier X

SEX

Spayed Female

AGE

11 Years

WEIGHT

16 Pounds

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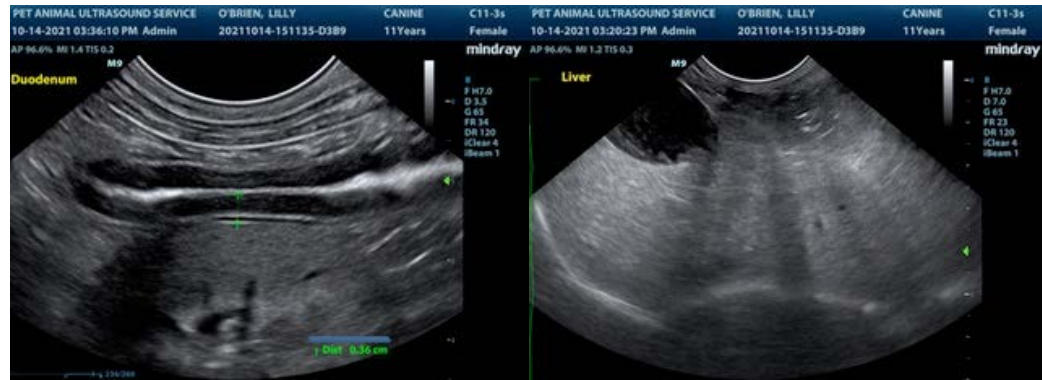
Dr. Lilan Hauser

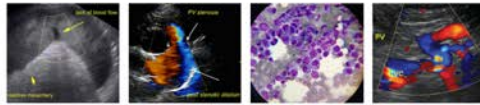
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PATIENT

Lilly O'Brien

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

SPECIES

Canine

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.

BREED

Terrier X

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

SEX

Spayed Female

AGE

11 Years

WEIGHT

16 Pounds

INTERPRETED BY

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DABVP (Canine and Feline)

**IMAGING
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Pamela Harrigan, RDMS

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