



**PATIENT PRESENTING CLINICAL SIGNS**

Lily MacGlashan

**SPECIES**

Canine

**BREED**

Border Collie

**SEX**

FS

**AGE**

16yr

**WEIGHT**

24.5lb

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Jenna Walsh CVT

**HOSPITAL NAME**

VCA Salem Animal  
Hospital

**REFERRING VET**

Dr Tremper

**INVOICE**

14500ag

**DATE**

08/08/2023

Presented on 8/4 for wellness exam, however at the time owner reported that Lily has decrease appetite, vomited once that week (of the 8/4), and continued weight loss (4.5lbs total so far). Physical exam, BCS 3/9, moderate to severe generalize muscle loss, hindlimb weakness (has progressed that unstable on feet - falling over when posturing to eliminate, and unable to go up or down stairs anymore) Current Medications Mirtazapine 7.5mg SID Primary Question/Differential to Be Answered in This Exam Cause for weight loss and decrease appetite. DX: neoplasia, GI upset, pancreatitis, etc. unable to increase appetite to eat more, and as of 8/7 turning nose to all other food (cooked chicken and other dog food that was eating on the weekend). Sleeping more and not engaging the owners as use to. Drinking and eliminating normally.

Abnormal PE/Chem/CBC/UA Results: Bloodwork done on 8/4: ALP 150, BUN 28, CREA 1.6, SDMA 14.4, Neutrophils 11340, Monocytes 980, T4 0.8 Weight trending downwards: 12/22 = 29lbs, 6/18/23 = 27lb, 8/4/23 = 24.5 lb

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3 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.

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. The left kidney measured 5.0 cm in length. The right kidney measured 4.7 cm in length.

The area of the aortic trifurcation was free of pathology.

**Adrenal Glands**

The bilateral adrenal glands were normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The left adrenal gland measured 2.4 cm length and 0.57 cm width in the caudal pole. The right adrenal gland measured 2.4 cm length and 0.58 cm width in the caudal pole.

**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.

**Liver/Gallbladder**

The liver exhibited generalized enlargement with primarily symmetrical capsule contour. A moderately sized irregular to mixed echogenic mass occupying the majority of the mid liver parenchyma was



**PATIENT**

Lily MacGlashan

**SPECIES**

Canine

**BREED**

Border Collie

**SEX**

FS

**AGE**

16yr

**WEIGHT**

24.5lb

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Jenna Walsh CVT

**HOSPITAL NAME**

VCA Salem Animal  
Hospital

**REFERRING VET**

Dr Tremper

**INVOICE**

14500ag

**DATE**

08/08/2023

present measuring ~ 8.0 cm in diameter. Intermittent separate hyperechoic nodules were present, an example measured 2.8 cm in diameter. The remainder of the parenchyma exhibited overtly normal echogenicity with mild coarse echotexture. Normal vascular volume. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content with mild non-organized lumen debris. 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 contained minor retained non-shadowing ingesta and fluid with no signs of ileus, obstruction or foreign material.

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.

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

**Pancreas**

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

**Free Abdomen**

No omental masses, overt lymphadenopathy or peritoneal effusion was present.

**ULTRASONOGRAPHIC FINDINGS**

- Hepatomegaly with non-homogenous intraparenchymal mass.
- Gallbladder debris (non-mucocele).
- Sonographically unremarkable GI tract with minor retained gastric ingesta/fluid.
- Mild pancreatic remodeling.
- Bilateral chronic renal changes.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Although sampling is required for further clarification, the hepatic mass is sonographically suggestive of neoplastic criteria such as carcinoma or other. Benign etiologies i.e., hematopoiesis, hyperplasia, granuloma etc. possible yet thought less likely.

Assuming normal clotting status and using a 25g needle, a liver mass and liver parenchyma FNA for screening cytology is warranted for further assessment. A hepatic core surgical biopsy is required for a definitive diagnosis. Curative surgical resectability is considered questionable to unlikely.

A GI panel to include PLI/TLI/Cobalamin/Folate is recommended. Three view chest radiographs are recommended if not done to assess for occult thoracic pathology. A thorough musculoskeletal and neurological examination is suggested if not done to assess for concurrent occult disease as a contributing factor to the weight loss.



**PATIENT**

Lily MacGlashan

**SPECIES**

Canine

**BREED**

Border Collie

**SEX**

FS

**AGE**

16yr

**WEIGHT**

24.5lb

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Jenna Walsh CVT

**HOSPITAL NAME**

VCA Salem Animal  
Hospital

**REFERRING VET**

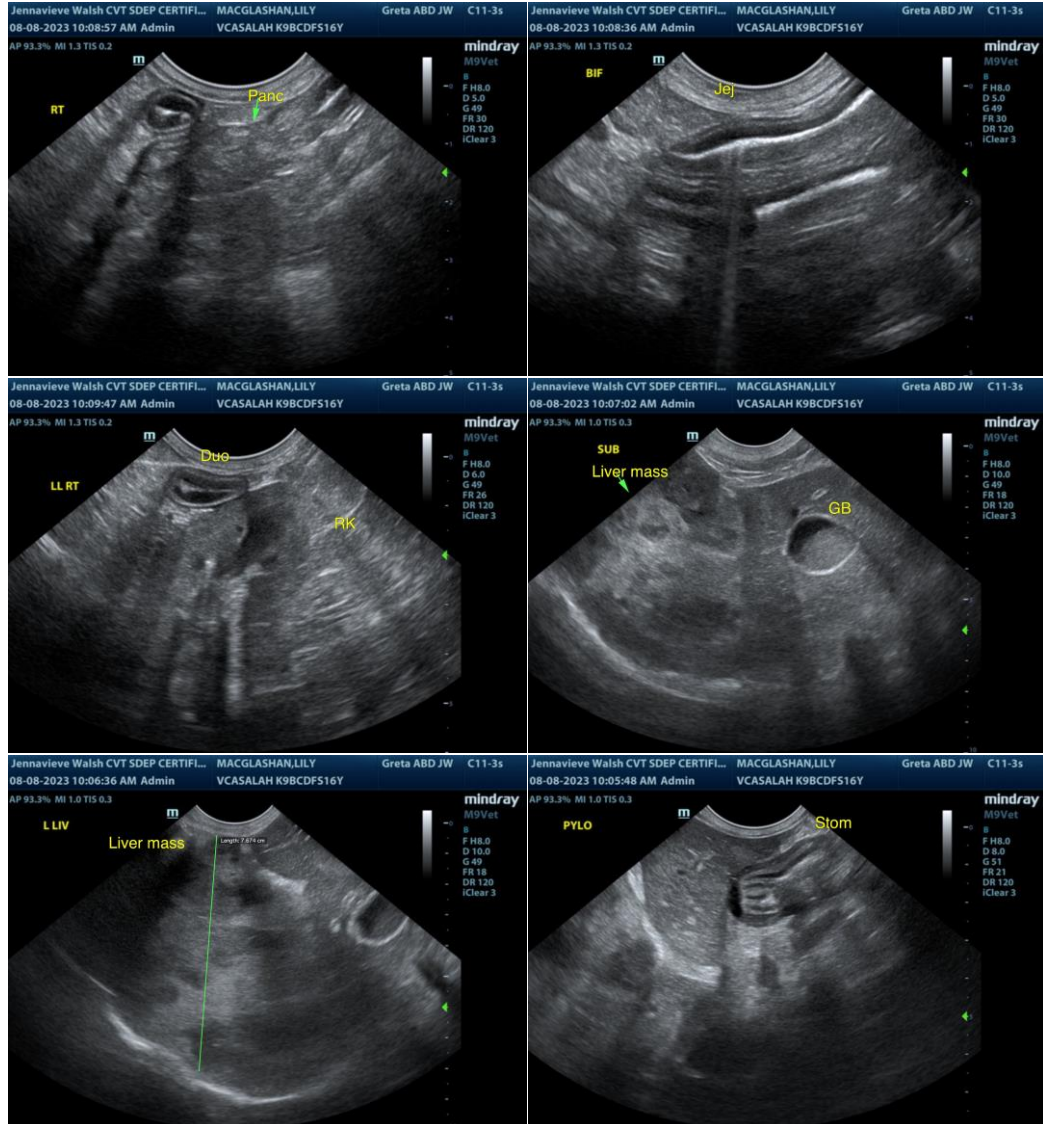
Dr Tremper

**INVOICE**

14500ag

**DATE**

08/08/2023





**PATIENT**

Lily MacGlashan

**SPECIES**

Canine

**BREED**

Border Collie

**SEX**

FS

**AGE**

16yr

**WEIGHT**

24.5lb

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Jenna Walsh CVT

**HOSPITAL NAME**

VCA Salem Animal  
Hospital

**REFERRING VET**

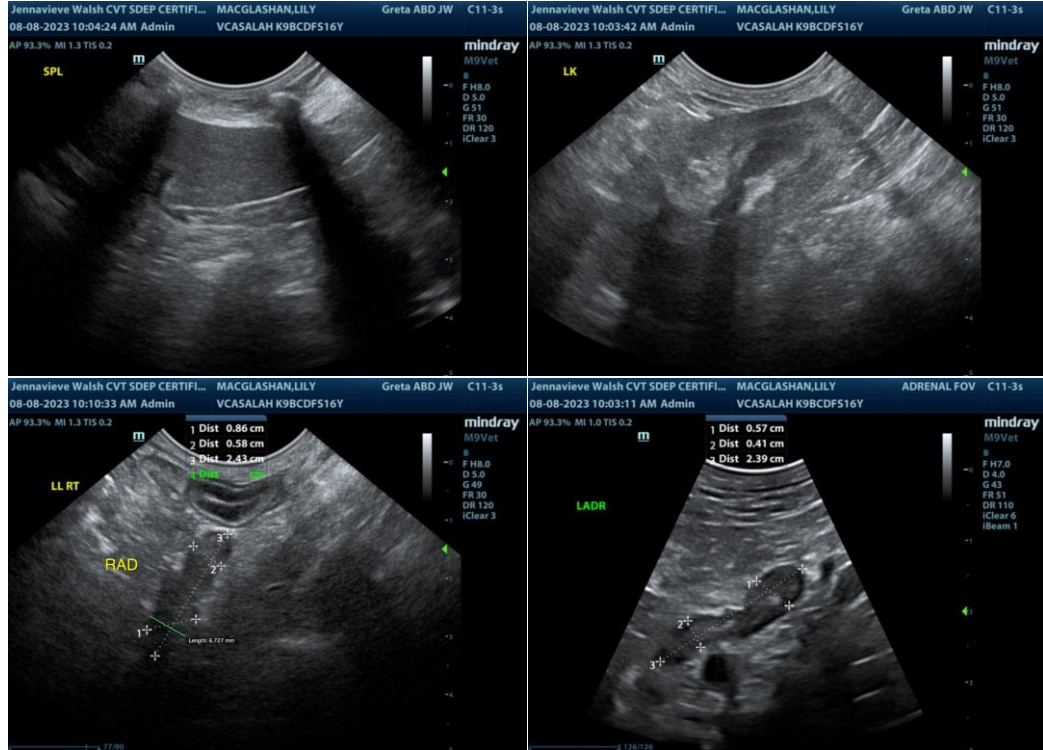
Dr Tremper

**INVOICE**

14500ag

**DATE**

08/08/2023



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