



**PATIENT**

Lucy Toliver

**SPECIES**

Canine

**BREED**

Boston Terrier

**SEX**

Female

**AGE**

12 Years 2 Months

**WEIGHT**

17.6 Pounds

**INTERPRETED BY**

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

**IMAGING  
PERFORMED BY**

Mack

**HOSPITAL NAME**

Northside VC

**REFERRING VET**

Dr. Mack

**INVOICE**

16240

**DATE**

6/23/22

**PRESENTING CLINICAL SIGNS**

History: Patient had surgery to remove 2nd digit on right hind foot with biopsy (came back as adenocarcinoma) as well as right popliteal lymph node (metastasis of an adenocarcinoma) Screening for other abnormalities or metastasis

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

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.

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 to moderate loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. Mild evidence of left retroperitoneal inflammation and scant free fluid was present. The left kidney measured 4.3 cm in length. No evidence of right retroperitoneal free fluid or inflammation. The right kidney measured 4.2 cm in length.

**Adrenal Glands**

The left adrenal gland exhibited asymmetrical enlargement with mild irregular capsule contour and nonhomogeneous parenchyma, measuring 2.2 cm in length x 1.24 cm at the caudal pole in width.

A soft tissue echogenicity was noted within the caudal vena cava when sonographically evaluating the right adrenal gland, likely consistent with vascular invasion associated with the enlarged irregular left adrenal gland.

The right adrenal gland was mildly prominent in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The right adrenal gland measured 1.8 cm x 0.72 cm. No overt evidence of vascular invasion associated with the right adrenal gland.

**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**

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. 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. The cystic and common bile ducts were normal.

**Gastrointestinal**



**PATIENT**

Lucy Toliver

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained mild to moderate nonshadowing ingesta/chyme without signs of obstruction or foreign material.

**SPECIES**

Canine

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.

**BREED**

***Pancreas***

Boston Terrier

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.

**SEX**

Female

***Free Abdomen***

A solitary subjectively normal medial iliac lymph node was noted adjacent to the iliac trifurcation, measuring 1.1 cm x 0.38 cm. This medial iliac lymph node was not consistent with inflammatory or neoplastic criteria and likely incidental or normal.

**AGE**

12 Years 2 Months

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

**WEIGHT**

17.6 Pounds

**ULTRASONOGRAPHIC FINDINGS**

- Left adrenal mass with probable associated vascular invasion
- Mildly prominent to nonhomogeneous right adrenal gland- no evidence of concurrent overt vascular invasion
- Sonographically unremarkable visualized solitary medial iliac lymph node
- Bilateral nonspecific chronic renal changes
- Sonographically unremarkable gastrointestinal tract with gastric ingesta/chyme- suspect postprandial presentation

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Mack

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**HOSPITAL NAME**

Northside VC

The left adrenal mass may indicate a separate primary neoplastic process, i.e., pheochromocytoma, adenocarcinoma or other, although the possibility of metastatic left adrenal disease, given the patients history, cannot be excluded. The right adrenal gland appeared to be mildly prominent and nonhomogeneous as well yet may indicate mild adenomatous change or mild benign hyperplasia and was not overtly consistent with concurrent right adrenal neoplastic criteria. Suspected associated left retroperitoneal inflammation and minor free fluid, secondary to the left adrenal pathology.

**REFERRING VET**

Dr. Mack

Given this presentation, abdominal CT would be ideal for further assessment of the left adrenal gland for evidence of regional metastasis, as well as surgical respectability, if clinically indicated. Screening blood pressure to assess for evidence of hypertension, which may allude to a pheochromocytoma, as well as three-view chest radiographs, if not done, are recommended.

**INVOICE**

16240

**DATE**

6/23/22



**PATIENT**

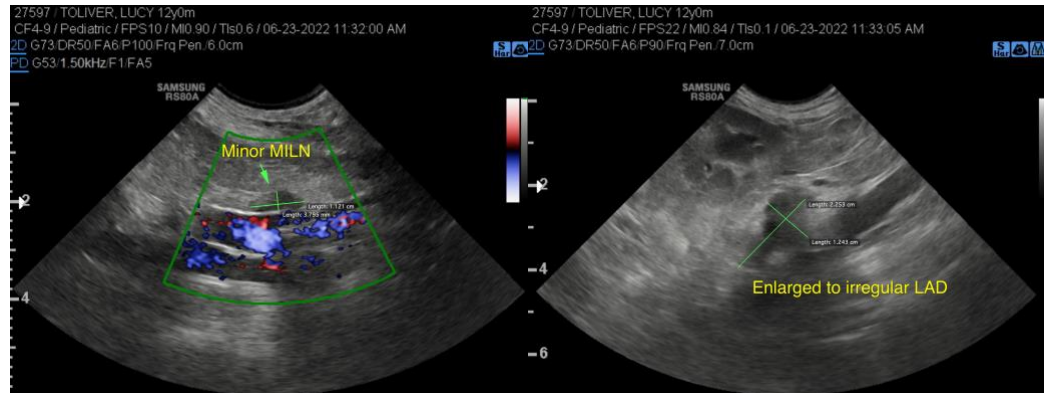
Lucy Toliver

**SPECIES**

Canine

**BREED**

Boston Terrier



**SEX**

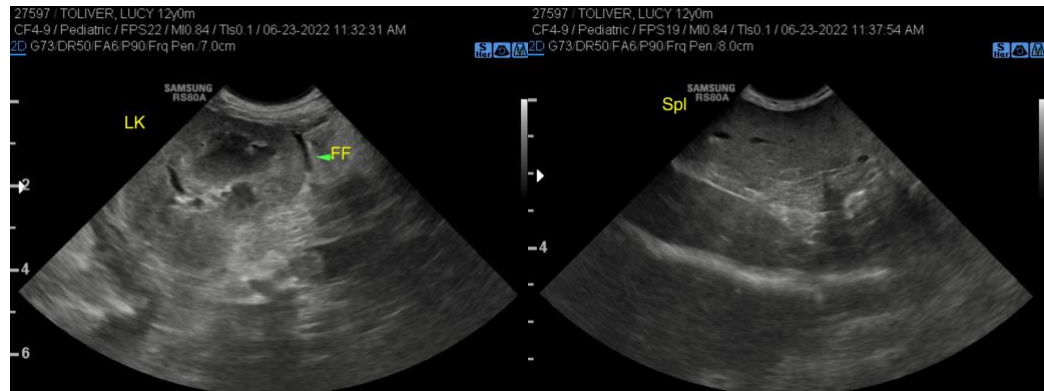
Female

**AGE**

12 Years 2 Months

**WEIGHT**

17.6 Pounds



**INTERPRETED BY**

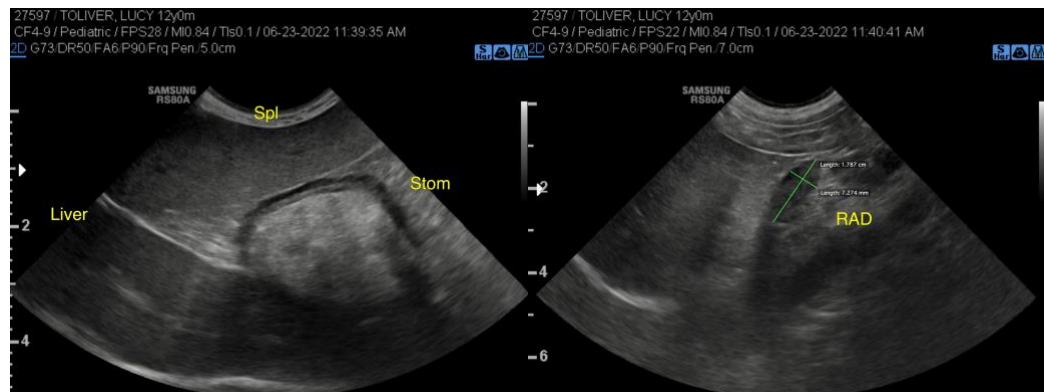
R. McKenzie Daniel,  
DVM, DABVP  
(Canine and Feline)

**IMAGING PERFORMED BY**

Mack

**HOSPITAL NAME**

Northside VC



**REFERRING VET**

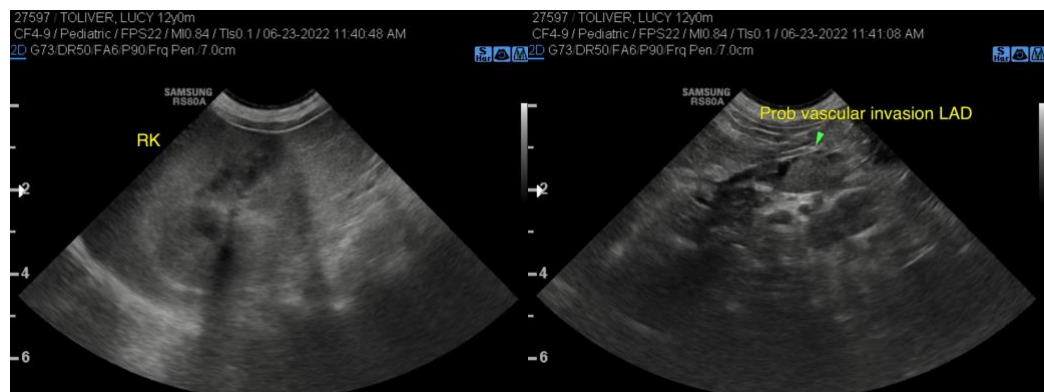
Dr. Mack

**INVOICE**

16240

**DATE**

6/23/22





**PATIENT**

Lucy Toliver

**SPECIES**

Canine

**BREED**

Boston Terrier



**SEX**

Female

**AGE**

12 Years 2 Months

**WEIGHT**

17.6 Pounds

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Mack

**HOSPITAL NAME**

Northside VC

**REFERRING VET**

Dr. Mack

**INVOICE**

16240

**DATE**

6/23/22

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.

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