



**PATIENT**

Sophie Jule

**SPECIES**

Canine

**BREED**

Golden Retriever

**SEX**

FS

**AGE**

12yr

**WEIGHT**

68lb

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Kiffney

**HOSPITAL NAME**

Northshore  
Veterinary Hospital

**REFERRING VET**

Dr. Kiffney

**INVOICE**

13615ag

**DATE**

04/27/2023

**PRESENTING CLINICAL SIGNS**

October 2021 she had mammary adenocarcinoma (one gland) and anal gland carcinoma removed. Owner has her ultrasounded every 6 months for cancer check. At that time (of surgery) her abdominal US showed ranial pole left adrenal gland nodule. of 1.1 cm

Abnormal PE/Chem/CBC/UA Results: pending today

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra 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 7.0 cm in length. The right kidney measured 7.1 cm in length.

A solitary normal medial iliac lymph node was present. The lymph node was essentially isoechoic to adjacent omentum without evidence of peripheral inflammation and maintaining a normal width: length ratio (<0.5). An example of a lymph node measured 1.7 cm x 0.41 cm. This finding is considered incidental and is not consistent with inflammatory or neoplastic criteria.

No evidence of medial, iliac or sublumbar masses.

**Adrenal Glands**

Previously noted well demarcated mildly non-uniform to hyperechoic cranial left adrenal nodule was present without evidence of mineralization measuring 1.1 cm in diameter. The nodule symmetrically distorted the adrenal capsule without evidence of parenchymal escape of vascular invasion.

The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.62 cm width at the caudal pole and 2.4 cm width at the cranial pole.

**Spleen**

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.

**Liver/Gallbladder**

The liver presented enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. Intermittent discrete mildly non-uniform to hyperechoic nodules were present, an example measuring 2.2 cm in diameter. 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



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signs of congestion. The gallbladder was non-distended in size with primarily anechoic luminal content and mild echogenic non-organized debris. The cystic and common bile ducts were normal.

**Gastrointestinal**

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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.

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.

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

**Pancreas**

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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.

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**Free Abdomen**

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

**ULTRASONOGRAPHIC FINDINGS**

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- Mild chronic renal changes.
- Static left adrenal nodule-consistent with adenoma given lack of progression from previous study.
- Mildly heterogenous spleen - benign.
- Hepatic parenchyma remodeling with intermittent suspect benign intraparenchymal nodules-nodules suggestive of discrete lipogranulomas or nodular hyperplasia.
- Gallbladder debris (non-mucocele).

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Largely a geriatric abdomen without evidence of significant visceral pathology. The possibility of early primary or metastatic hepatic nodules as well as neoplastic left adrenal nodule cannot be definitively excluded.

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Intermittent monitoring of BP is advised to assess for evidence of hypertension which may allude to emerging adrenal neoplastic criteria i.e., pheochromocytoma. Ideally sonographic monitoring of the left adrenal nodule and hepatic nodules for evidence of progression is recommended.

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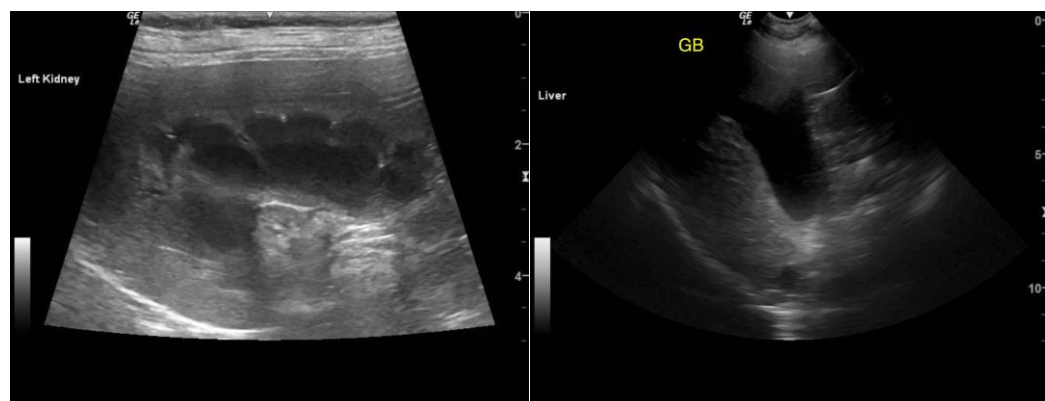
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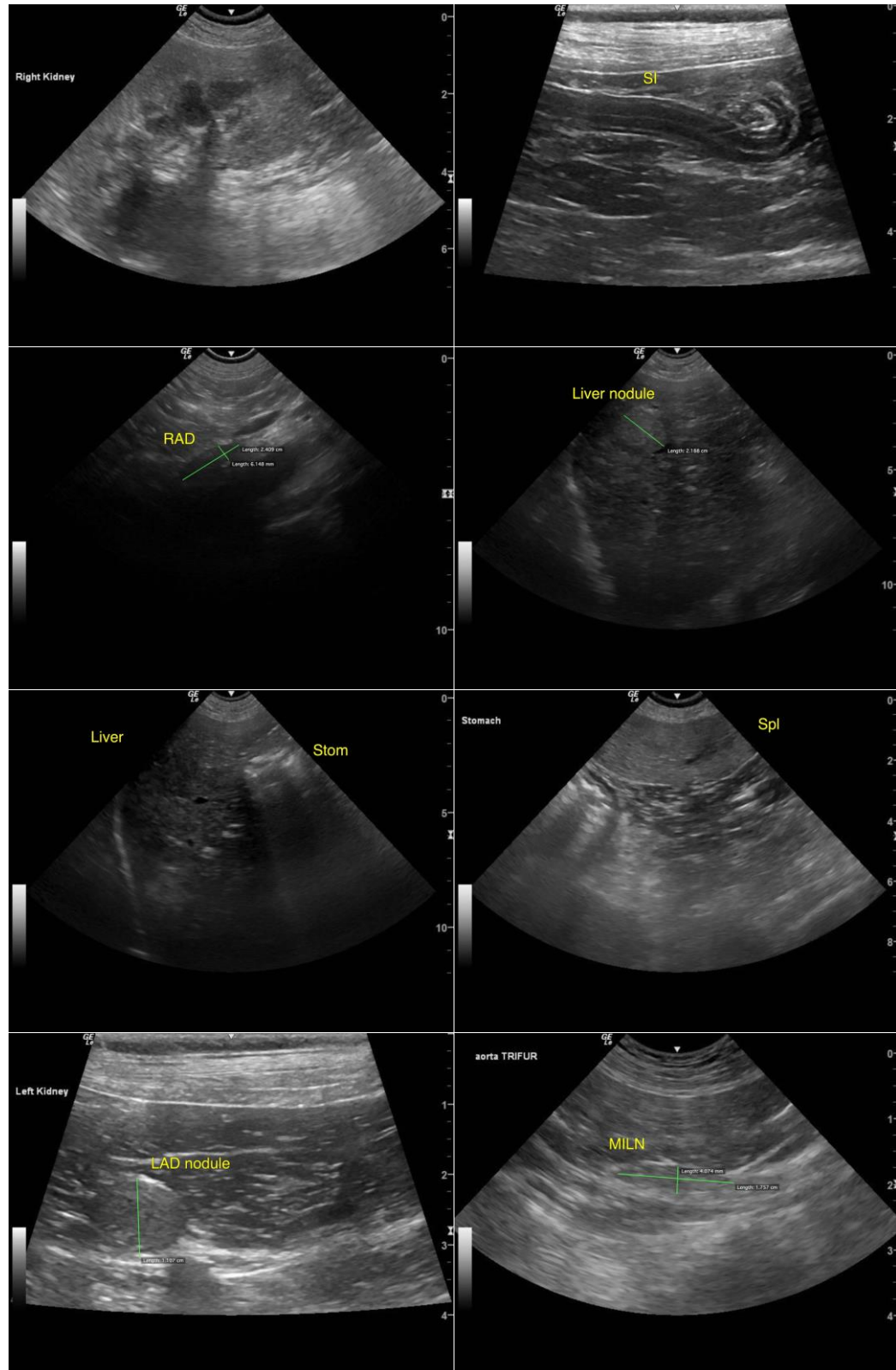
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not



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visible in the image/video clips provided.

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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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