



**PATIENT PRESENTING CLINICAL SIGNS**

**PATIENT**  
Buddy Moore

**SPECIES**  
Canine

**BREED**  
Golden Retriever

**SEX**  
MN

**AGE**  
14 yr

**WEIGHT**  
33.7 kg

History: Buddy presented to BAESC for AUS with Dr. Mayfield, as referred by Tumalo Animal Hospital; Dr. Keaton Cuthbert for the following problem list: 1.) weight loss 2.) vomiting-r/o GI upset vs related to elevated liver values vs other 3.) mass on right anal gland -r/o anal gland carcinoma vs inflammatory vs other 4.) elevated liver enzymes-r/o neoplasia (primary vs metastasis) vs inflammatory vs other PLAN SECTION -- in house labwork revealed elevated liver enzymes, mild hepatomegaly appreciated on imaging. No obvious masses or fluid appreciated on brief ultrasound -- Discussed presence of anal gland mass-recommend FNA of mass to r/o neoplasia. Owner declines today, would like to make sure nothing more systemic is going on prior to testing. Discussed potential for metastasis of anal gland carcinoma. No elevation on Ca on labwork today -- patient hospitalized for the day IV catheter placed, LRS ran at 200 ml/hr cerenia administered IV 2.7 ml at 9:45 am; Patient responded well to supportive care. -- Patient is blind -- Client has noticed swelling on the left lateral commissure that began this morning (5/14/22). Clients adopted a 13 week old puppy that has been chewing and playful with Buddy, may have caused mild trauma. The puppy may also have kennel cough, therefore Buddy was started on Doxycycline. He has had slightly soft stools for the last several days. -- No persistent vomiting has been appreciated since 5/2/2022 and Buddy appears to be in good spirits.

Abnormal PE/Chem/CBC/UA Results: PE: Blind OU, cataracts OU. Dental disease, generalized lean muscle atrophy and lean. Stiff on ambulation. Partial puncture wound and mild swelling on the L lateral commissure of the face. Dried blood in the horizontal aural canal (L side). TM is intact AS. R sided anal sac mass palpable on rectal (~ 2 cm, firm). Blood work (5/2/2022): -- ALT: 323 U/L -- ALP: 1831 U/L (increased) -- Chol: 365 mg/dL (increased) -- Glob: 4.7 g/dL (increased) -- GGT: 16 U/L (increased) -- BUN: 6 mg/dL (decreased) --MONO: 1470/uL (slightly increased) -- Abdominal rads: NSF -- 3-view thoracic rads: NSF

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**INTERPRETED BY**

**Urinary System**

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

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.

**IMAGING**

**PERFORMED BY**  
Patti Mayfield DVM

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 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 7.5 cm in length. The right kidney measured 8.0 cm in length.

**HOSPITAL NAME**

Tumalo Animal Hospital

The area of the aortic trifurcation was free of pathology.

**REFERRING VET**

Dr. Cuthbert

Several mildly enlarged primarily homogeneous medial iliac lymph nodes adjacent to the iliac trifurcation were present. The nodes appeared to maintain a width: length ratio of <0.5 an example measuring 2.9 cm x 1.3 cm.

**Adrenal Glands**

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10624ag

Both adrenal glands were prominent to mildly enlarged in size exhibiting asymmetrical capsule contour and non-homogeneous parenchyma with focal hyperechoic parenchyma foci. Subtle notch noted in the area of the left phrenic vein associated with the left adrenal gland. The left adrenal gland measured 0.98 cm width at the caudal pole and 1.3 cm width at the cranial pole. The right adrenal gland measured 0.84 cm width at the caudal pole and 1.8 cm width at the cranial pole.

**DATE**

05/14/2022



**PATIENT** *Spleen*

Buddy Moore 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.

**SPECIES**

Canine

*Liver*

**BREED**

Golden Retriever

The liver exhibited generalized enlargement and areas of capsule asymmetry. Diffuse nonuniform to mixed echogenic parenchyma was present with multiple variably sized isoechoic to nonhomogeneous macronodules to potential small masses an example measuring 5.7 cm in diameter. The nodules to potential mass lesions did not appear to distort the hepatic capsule. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content with mild dependent to nondependent debris. The cystic and common bile ducts were normal.

**SEX**

MN

*Gastrointestinal*

**AGE**

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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.

**WEIGHT**

33.7 kg

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

*Pancreas*

**INTERPRETED BY**

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

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 peritoneal effusion was present.

**IMAGING**

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Patti Mayfield DVM

**ULTRASONOGRAPHIC FINDINGS**

**HOSPITAL NAME**

Tumalo Animal Hospital

- Mild medial iliac lymphadenopathy-hyperplasia, lymphadenitis, early neoplastic criteria given presence of anal sac mass
- Bilateral prominent to irregular adrenal glands exhibiting nonhomogeneous to pinpoint parenchyma-age related benign hyperplasia, adenomatous change, potential for unilateral to bilateral emerging primary vs metastatic neoplasia possible
- Chronic hepatopathy exhibiting nonuniform parenchyma with intermittent variably sized macronodules/small mass lesions-chronic vacuolar hepatopathy, inflammatory/immune mediated disease, areas of nodular hyperplasia, fibrosis, hematopoiesis, primary vs metastatic neoplasia or other hepatopathy
- Mild gallbladder debris (non-mucocele)
- Overtly normal GI tract

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Dr. Cuthbert

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

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Pending sampling of the right anal sac mass if elected, ultrasound guided FNA of an enlarged medial iliac lymph node if accessible as well as hepatic FNA assuming normal clotting status is warranted for



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Dr. Cuthbert

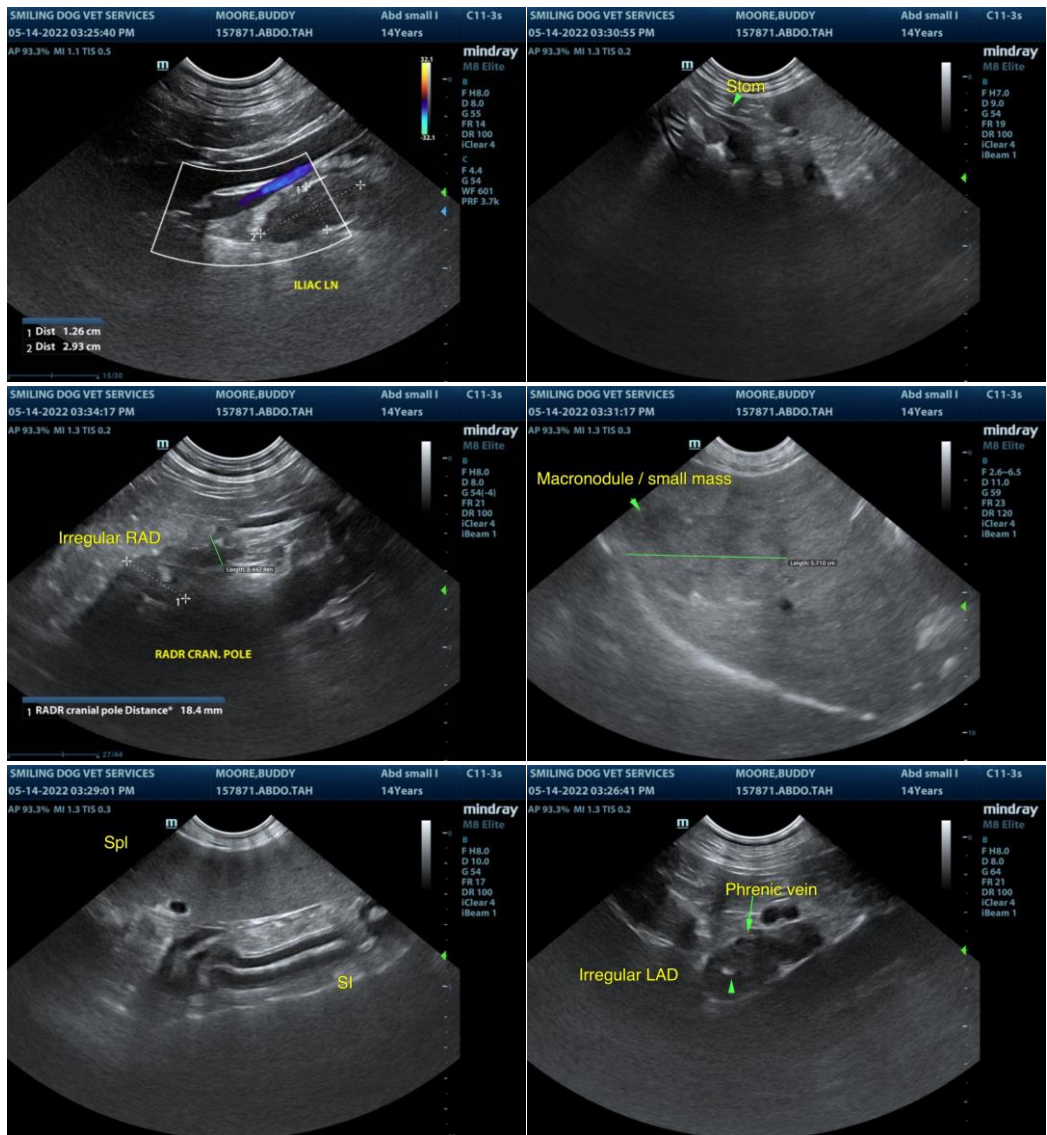
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further assessment. An adrenal workup could be considered in this patient if clinical signs consistent with hyperadrenocorticism are present, however given lack of reported clinical signs i.e. PU/PD, polyphagia etc. adrenal hyperfunctionality may be considered less likely. Systemic BP assessment suggested to screen for hypertension which may allude to a adrenal pheochromocytoma. Empirical hepatosupportive medications including Denamarin and Ursodiol may be beneficial. A guarded prognosis pending additional diagnostics.





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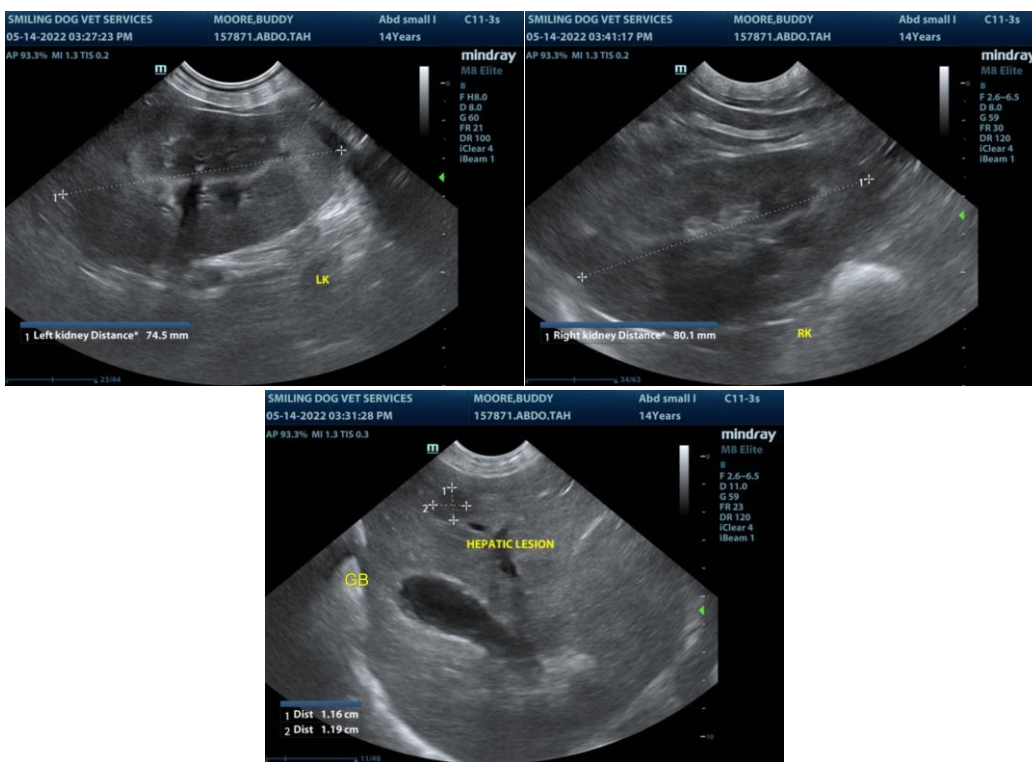
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

**IMAGING PERFORMED BY**

Patti Mayfield DVM

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)

**HOSPITAL NAME**

info@SonoPath.com

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