



**PATIENT**

Buddy Boy Miskowski

**SPECIES**

Canine

**BREED**

Min Schnauzer

**SEX**

Male

**AGE**

13yr

**WEIGHT**

33lb

**INTERPRETED BY**

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

**IMAGING  
PERFORMED BY**

Chaley Hunt LVT

**HOSPITAL NAME**

Columbia Animal  
Clinic

**REFERRING VET**

Dr. Engel

**INVOICE**

11211ag

**DATE**

07/27/2022

**PRESENTING CLINICAL SIGNS**

**History:** Periods of collapse and can't get up recently, recent anemia. Over the weekend Buddy has had periods of collapse and appears like he's not able to move. Moving fine at exam on 7/25. Radiographs 7/25 showed enlarged liver and possible spleen with rounded edges. Seems painful in abdomen. Was given Buprenorphine SR, Cerenia injection and oral cerenia sent home. He is on Galliprant and gabapentin chronically for osteoarthritis. Cortisol was done on 7/22/22 due to pot bellied appearance on senior exam.

**Abnormal PE/Chem/CBC/UA Results:** Labwork on 7/25 RBC - 4.86 HCT- 31.1% Hemoglobin: 10.8 Cortisol on 7/22 - 4.1

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2 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 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 5.3 cm in length. The right kidney measured 5.8 cm in length.

The area of the aortic trifurcation was free of pathology.

The prostate was enlarged in size with intact, symmetrical capsule contour. The margins of the gland were intact and able to be differentiated from the surrounding tissue. The prostatic parenchyma was mildly echogenic to heteroechoic without parenchymal mineralization. The prostate measured 2.6 cm in diameter.

**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 0.74 cm width in the cranial pole and 0.83 cm width in the caudal pole. The right adrenal gland measured 0.6 cm width in the caudal 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**

The liver was subjectively enlarged in size with normal structure, and contour. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective



<b>PATIENT</b>	mild to benign parenchymal remodeling. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non distended in size with echogenic, nonmineralized, nondependent biliary sludge. The biliary sludge was non organized with a hypoechoic to anechoic, irregular to interrupted rim visible between the nondependent sludge and inner wall. No signs of peripheral inflammation.
Buddy Boy Miskowski	
<b>SPECIES</b>	<b>Gastrointestinal</b>
Canine	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.
<b>BREED</b>	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.
Min Schnauzer	
<b>SEX</b>	Normal visible colon wall layers were present with apparent formed feces in lumen.
Male	<b>Pancreas</b>
<b>AGE</b>	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.
13yr	<b>Free Abdomen</b>
<b>WEIGHT</b>	Suspect retained testicle exhibiting normal contour and size either in the distal inguinal canal cranioventral to the level of the prostate or possibly in the SC inguinal space. The suspected retained testicle measured approximately 3.0 cm in diameter.
33lb	
<b>INTERPRETED BY</b>	<b>ULTRASONOGRAPHIC FINDINGS</b>
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	<ul style="list-style-type: none"> <li>• Mild benign prostatic hyperplasia, potential for prostatitis considered unlikely</li> <li>• Suspect retained testicle either in the distal inguinal canal cranioventral to the level of the prostate or possibly in the SC inguinal space, correlation with clinical history recommended</li> <li>• Normal splenic size/contour with mild parenchyma heterogeneity-benign</li> <li>• Hepatomegaly exhibiting mild remodeled parenchyma-subjectively benign</li> <li>• Early/partial gallbladder mucocele</li> <li>• Bilateral chronic renal changes</li> </ul>
<b>IMAGING PERFORMED BY</b>	<b>INTERPRETATION OF THE FINDINGS &amp; FURTHER RECOMMENDATIONS</b>
Chaley Hunt LVT	No overt evidence of hepatosplenic neoplastic criteria was noted. A full chemistry panel to assess hepatic enzyme levels is recommended if not recently done. Hepatosupportive medications including Denamarin and Ursodiol may be beneficial. Some or all of the following protocol may be beneficial.
<b>HOSPITAL NAME</b>	Enrofloxacin 5 mg/kg SID PO & Metronidazole (10-20 mg/kg po bid) over 3 weeks, Ursodiol (10-15 mg/kg p.o. q24h) over 8 weeks and recheck sonogram. Monitor rapid rise in ALT, SAP, Bilirubin, bilirubinuria, leukocytosis, focal cranial abdominal subxiphoid discomfort or progressive anorexia.
Columbia Animal Clinic	
<b>REFERRING VET</b>	<b>INVOICE</b>
Dr. Engel	More information regarding clinical emerging mucocele issues may be found with our article and research at <a href="http://sonopath.com/resources/articles">http://sonopath.com/resources/articles</a> , Defining a GB Mucocele and Clinical Parameters in Dogs with Sonographically Diagnosed Surgical Biliary Disease from ECVIM 2009.
<b>DATE</b>	Sonographic monitoring of the gallbladder is recommended if the patient seems to exhibit discomfort in the area of the cranial abdomen/subxiphoid. Three view chest radiographs to rule out thoracic pathology are recommended if not recently done.
07/27/2022	



**PATIENT**

A definitive cause of the mild anemia was not overtly evident within the abdominal cavity.

Buddy Boy Miskowski

**SPECIES**

Canine

**BREED**

Min Schnauzer

**SEX**

Male

**AGE**

13yr

**WEIGHT**

33lb

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Chaley Hunt LVT

**HOSPITAL NAME**

Columbia Animal  
Clinic

**REFERRING VET**

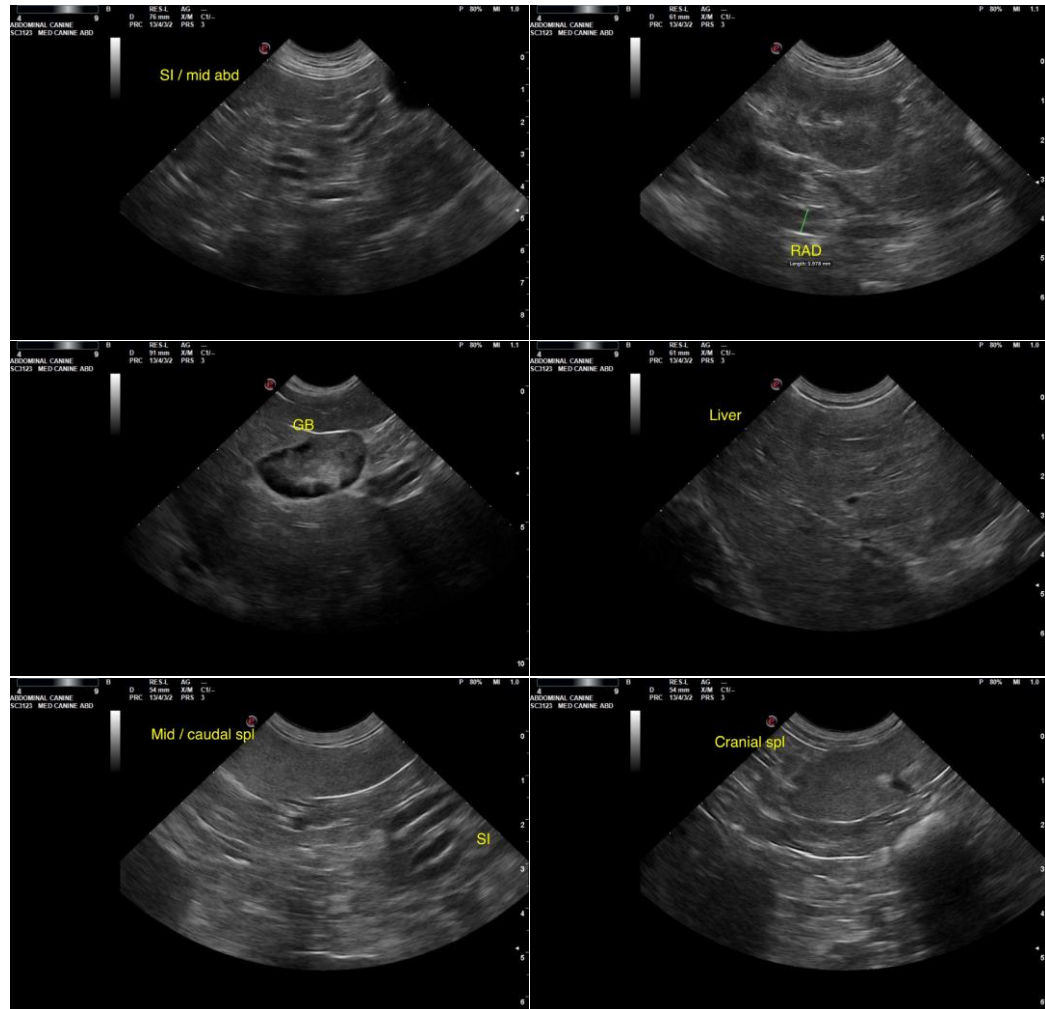
Dr. Engel

**INVOICE**

11211ag

**DATE**

07/27/2022





**PATIENT**

Buddy Boy Miskowski

**SPECIES**

Canine

**BREED**

Min Schnauzer

**SEX**

Male

**AGE**

13yr

**WEIGHT**

33lb

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Chaley Hunt LVT

**HOSPITAL NAME**

Columbia Animal  
Clinic

**REFERRING VET**

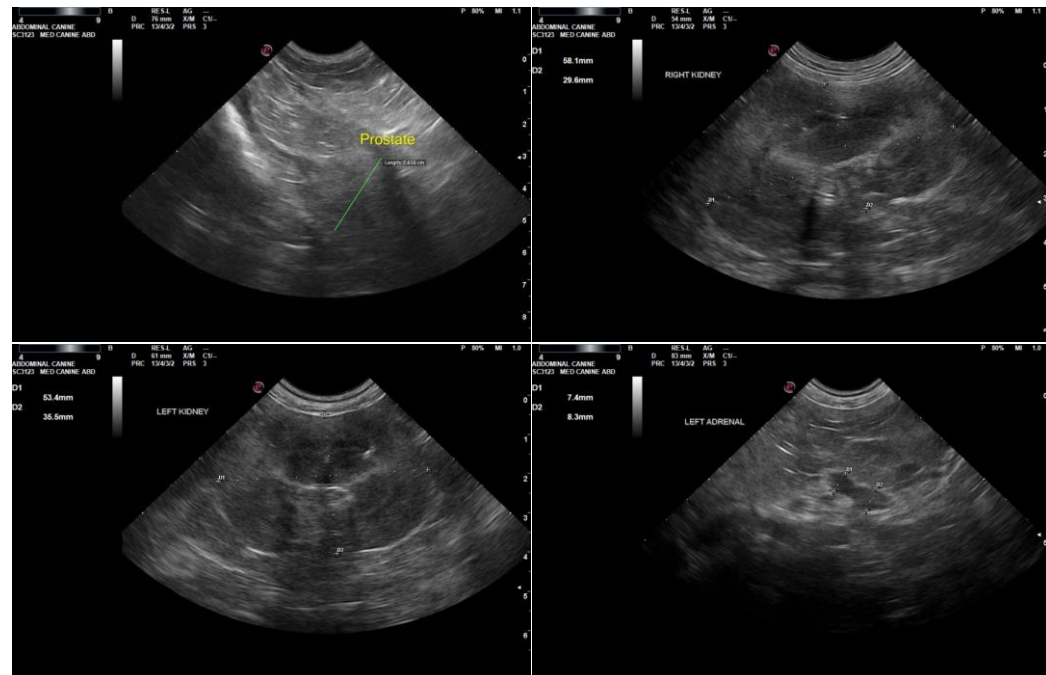
Dr. Engel

**INVOICE**

11211ag

**DATE**

07/27/2022



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