



**PATIENT**

Annie Smith

**SPECIES**

Canine

**BREED**

Lhasa Apso

**SEX**

Spayed Female

**AGE**

9 Years

**WEIGHT**

23 Pounds

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Ebersole

**HOSPITAL NAME**

Scanvet

**REFERRING VET**

Dr. Walsh-Meiczinger

**INVOICE**

18887

**DATE**

11/29/22

**PRESENTING CLINICAL SIGNS**

History: Pet had a UTI in July. Was treated at E clinic. UTI didn't resolve. On recheck at RDVM, extended the antibiotics (Clavamox). UTI seemed to have resolved. However, pet has continued to urinate (and now defecate) in the house. DDx behavioral vs medical underlying cause. Sample for C&S today.

Abnormal PE/Chem/CBC/UA Results: CBC/Chem/T-4 (11/8/22): Trig 250, ALT 159. Rest WNL. UA (9/9/22): SG 1.015, rest WNL. UA (8/16/22): SG 1.030, Bili +1, Prot 3+. RBC 2-5/HPF, Marked Rods >40 HPF. Fecal Ag: NEG

**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. Primarily anechoic urine was present in the lumen. Mild nondependent particulate sediment was present, which may indicate cellular debris/protein, crystalline debris or mucus, without evidence of calculus formation. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic mural 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 5.3 cm in length. The right kidney measured 5.3 cm in length. Pinpoint medullary mineral was present in both kidneys.

**Adrenal Glands**

Bilateral adrenal glands were mildly prominent based on caudal pole measurement in light of body weight, with uniformly hypoechoic parenchyma. The left adrenal gland measured 2.4 cm in length x 0.81 cm width at the caudal pole. The right adrenal gland measured 1.9 cm in length x 0.64 cm width at the caudal pole. No adrenal tumors noted.

**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 exhibited mild generalized enlargement, symmetrical capsule contour and mild nonuniform increased parenchyma echogenicity compared to the spleen and falciform fat. No masses or nodules were noted.

The gallbladder was non distended in size with mild echogenic, nonorganized debris and primarily anechoic gallbladder content without evidence of gallbladder or peripheral gallbladder inflammation. The cystic duct and common bile ducts were normal without evidence of dilation.

**Gastrointestinal**



**PATIENT**

Annie Smith

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.

**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.

**Pancreas**

**BREED**

Lhasa Apso

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**

**SEX**

Spayed Female

No overt lymphadenopathy or peritoneal effusion was present.

**ULTRASONOGRAPHIC FINDINGS**

**AGE**

9 Years

- Sonographically unremarkable urinary bladder/visible proximal urethra with mild urinary bladder sediment
- Mild age-related renal changes with pinpoint medullary mineral- no evidence of pyelonephritis

**WEIGHT**

23 Pounds

- Mildly prominent bilateral adrenal glands
- Hepatomegaly exhibiting mild nonuniform parenchyma hyperechogenicity

**INTERPRETED BY**

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

- Mild gallbladder debris (non-mucocele)
- Mild pancreatic remodeling- likely patient/age-related variant. Potential for minor remodeling if previous episodes of pancreatitis.
- Sonographically unremarkable gastrointestinal tract/colon

**IMAGING PERFORMED BY**

Dr. Ebersole

**HOSPITAL NAME**

Scanvet

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Pending urine culture and sensitivity, ideally on sterile urine sample, to assess for persistent infection is recommended. Although no reported PU/PD or polyphagia, adrenal work up could be considered in this patient if clinical suspicion for Cushings syndrome. Assuming normal clotting status, screening hepatic FNA cytology could be considered primarily to assess for evidence of inflammatory cells. No overt evidence of hepatic neoplastic criteria. Hepatosupportive medications including Denamarin and Ursodiol may prove beneficial.

**REFERRING VET**

Dr. Walsh-Meiczinger

If documented recurrent infection, a higher dose/shorter frequency antibiotic regimen, ideally based on urine culture and sensitivity results, i.e., Clavamox or Enrofloxacin at 20 mg/kg PO SID for 3-5 days may prove more effective at eliminating persistent UTI.

**INVOICE**

18887

**DATE**

11/29/22



**PATIENT**

Annie Smith

**SPECIES**

Canine

**BREED**

Lhasa Apso

**SEX**

Spayed Female

**AGE**

9 Years

**WEIGHT**

23 Pounds

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Ebersole

**HOSPITAL NAME**

Scanvet

**REFERRING VET**

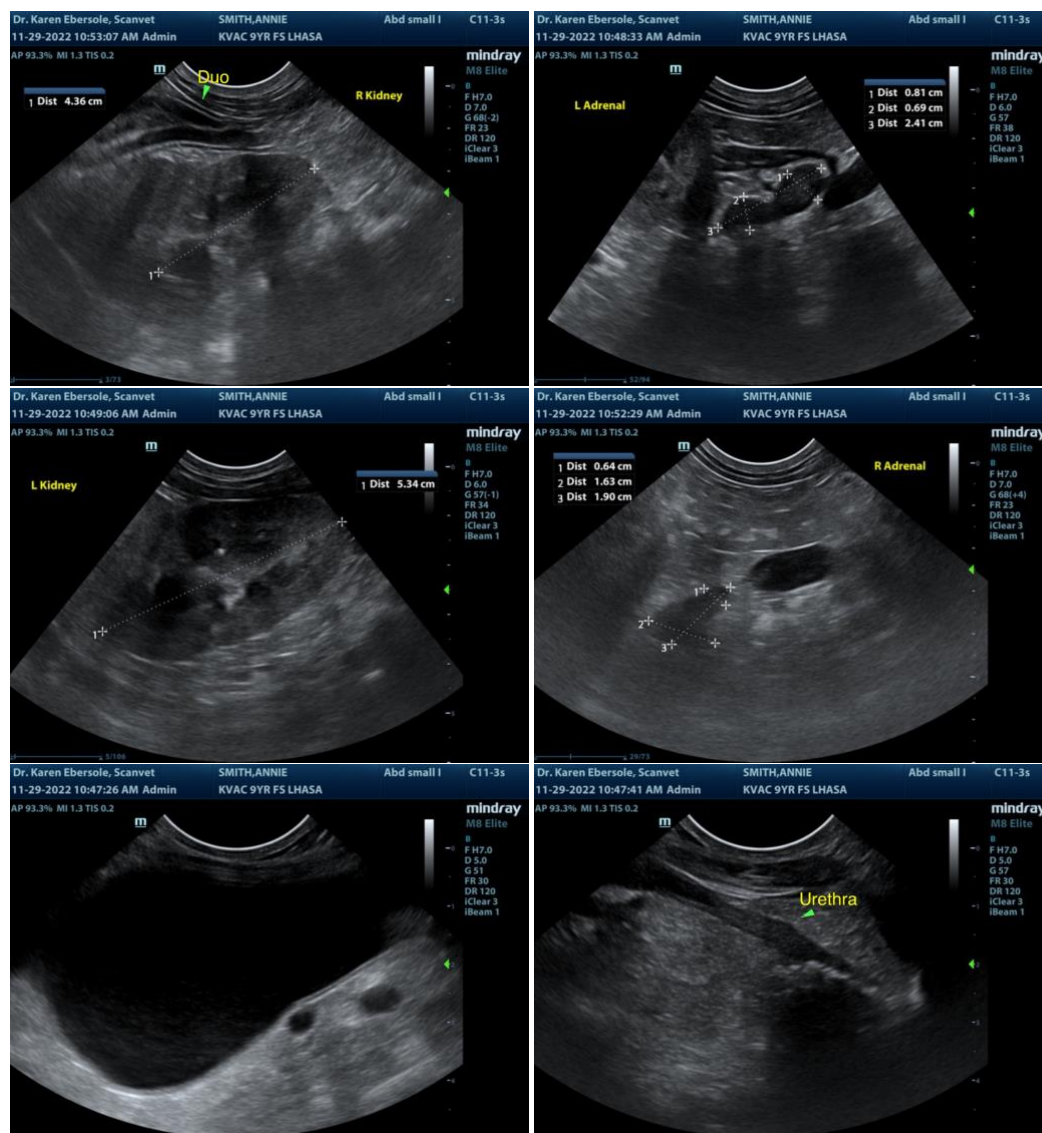
Dr. Walsh-Meiczinger

**INVOICE**

18887

**DATE**

11/29/22





**PATIENT**

Annie Smith

**SPECIES**

Canine

**BREED**

Lhasa Apso

**SEX**

Spayed Female

**AGE**

9 Years

**WEIGHT**

23 Pounds

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Ebersole

**HOSPITAL NAME**

Scanvet

**REFERRING VET**

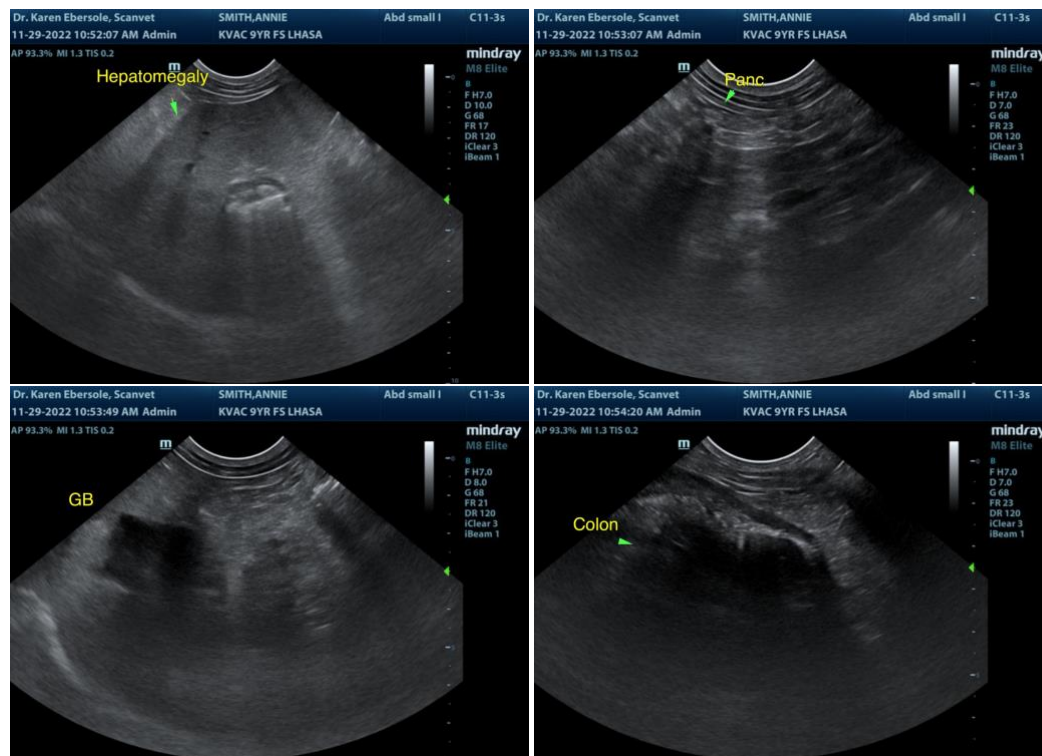
Dr. Walsh-Meiczinger

**INVOICE**

18887

**DATE**

11/29/22



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