



**PATIENT**

Lulu Nimms

**SPECIES**

Canine

**BREED**

Pekingese

**SEX**

Intact Female

**AGE**

12 Years

**WEIGHT**

18.5 Pounds

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Louise Mandeville

**HOSPITAL NAME**

Bettervet

**REFERRING VET**

Dr. Louise Mandeville

**INVOICE**

16087

**DATE**

6/14/22

**PRESENTING CLINICAL SIGNS**

History: Hx: presenting for follow up after presenting for UTI at ER twice in past few weeks Dog seen at Boston West in early May and again at VEG on 5/29 for hematuria Tx'd each time with Clavamox for 7 day course, responded well while on Clavamox, but showing subtle symptoms of not feeling well such as shaking and seeming off once off meds. Last dose of most recent Clavamox was 6/5/22 am. Dog has been on Zonisamide, 50 mg PO BID for years for epilepsy, overall good control, dog typically has 2-3 seizure/year. Since recent UTI issues, dog has had 2-3 seizures in past few week. O concerned dog may have pyometra or pyelonephritis. Bloodwork, urine culture not done as part of UTI workup at either recent ER visit O also rectal Valium for use when needed for seizures.

Abnormal PE/Chem/CBC/UA Results: During ultrasound exam very restless (owner refuses to use pre-visit meds), owner insists on holding dog and will not allow dog to lie down on side in case of discomfort. Hunched appearance and walks stiffly then after few steps lies on belly with legs out in frog leg position. Entire ultrasound performed while dog standing and or sitting. CBC: neutrophilic leukocytosis, elevated plts, Chem 25: slightly elevated ALT and significantly elevated Alk Phos

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder presented uniformly thickened urinary bladder wall isoechoic to the adjacent normal urinary bladder wall. The luminal margin of the thickened urinary bladder wall was mildly asymmetrical in contour. Urinary bladder wall thickness measured 0.45 cm width. Mineralization or echogenic foci within the thickened areas of urinary bladder wall was not present. The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra exhibited normal tone. Anechoic urine was present in the lumen with mild to moderate particulate urinary bladder sediment. The ureteral papillae were normal. The ureters were not visible which is normal.

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 left or right pyelectasia was present. A moderately sized cyst (2.7 cm) occupying the cranial left kidney was present. The cyst was thinly walled containing anechoic fluid. The left kidney measured 4.7 cm in length. The right kidney measured 4.8 cm in length. Intermittent smaller cortical cysts were present.

**Adrenal Glands**

The left adrenal gland was not definitively visualized.

The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.63 cm width at the caudal pole.

**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 presented increased in size. Mild increased hepatic parenchyma echogenicity, compared to the falciform fat and spleen with moderate coarse echotexture was noted. Evidence of parenchymal



**PATIENT**

Lulu Nimms

remodeling was noted. The capsule of the liver was symmetrical in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion.

**SPECIES**

Canine

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

**BREED**

Pekingese

**Gastrointestinal**

The stomach presented mild wall thickening secondary to echogenic mucosa hypertrophy. Intact wall layering was maintained and distinct. The gastric body wall measured 0.59 cm width. The stomach contained a mild amount of retained anechoic fluid and ingesta/chyme.

**SEX**

Intact Female

The intestinal walls demonstrated intact wall layering and maintained 1:3 muscularis / mucosa ratio. The mucosa exhibited mild decreased echogenicity with occasional mucosal speckling. A mild segmental ileus, along with segmental echogenic ingesta/chyme was present.

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

**AGE**

12 Years

**Pancreas**

The pancreas was indistinctly visualized yet overtly normal without overt sonographic evidence of active inflammation.

**WEIGHT**

18.5 Pounds

**Free Abdomen**

No omental masses, overt lymphadenopathy or peritoneal free fluid was present.

**Other**

**INTERPRETED BY**

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

The visualized uterus exhibited overtly normal presentation without evidence of luminal fluid accumulation. The uterine body measured 0.73 cm in width.

**IMAGING PERFORMED BY**

Dr. Louise Mandeville

**HOSPITAL NAME**

Bettervet

**ULTRASONOGRAPHIC FINDINGS**

- Cystitis pattern- suspect chronic interstitial versus bacterial cystitis
- Bilateral chronic renal changes with cranial left kidney cyst- no overt pyelonephritis
- Gastroenteritis pattern with possible mild gastric hypomotility
- Nonspecific hepatopathy- subjectively benign
- Overtly normal visualized uterus- no obvious sonographic evidence of pyometra
- Minor gallbladder debris

**REFERRING VET**

Dr. Louise Mandeville

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Urine culture and sensitivity on sterile sample would be ideal with antibiotic protocol, ideally, based on urine culture and sensitivity results. Given the recurrent UTIs in this patient, and based on urine culture and sensitivity results, a higher dose/shorter frequency antibiotic protocol (i.e., enrofloxacin or clavamox at 20 mg/kg PO SID) for 5 days, given the likelihood of cystitis, may prove more effective at eliminating recurrent or embedded infection.

**INVOICE**

16087

**DATE**

6/14/22



**PATIENT**

Lulu Nimms

Vacuolar hepatopathy, low-grade inflammatory hepatopathy may be considered primary etiologies for the liver. Ultrasound guided FNA of the liver could be considered for screening cytology and further assessment. Hepatosupportive medications may prove beneficial.

**SPECIES**

Canine

As needed gastrointestinal support and conservative therapy for gastroenteritis/inflammatory gastroenteropathy is recommended.

**BREED**

Pekingese

**SEX**

Intact Female

**AGE**

12 Years

**WEIGHT**

18.5 Pounds

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Louise Mandeville

**HOSPITAL NAME**

Bettermvet

**REFERRING VET**

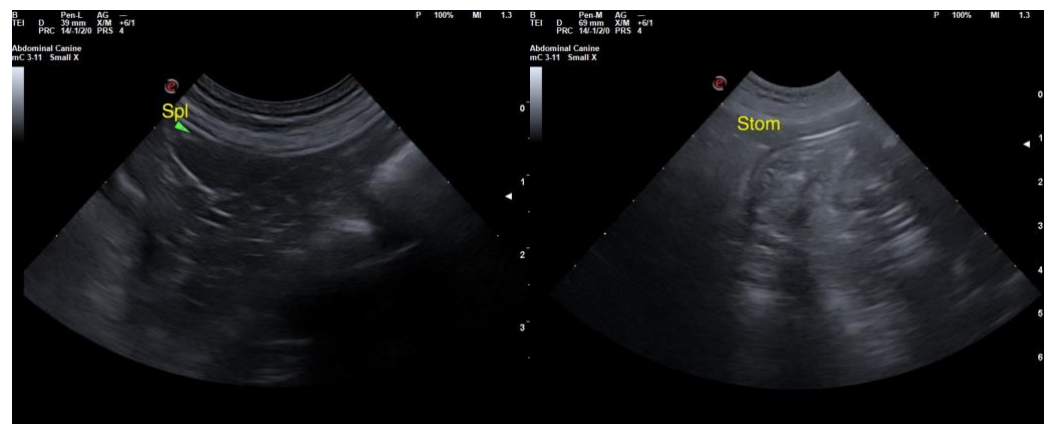
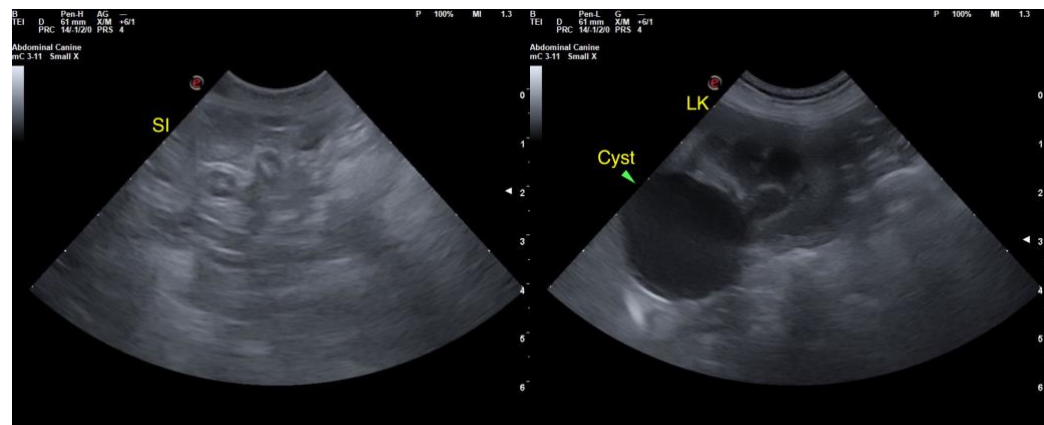
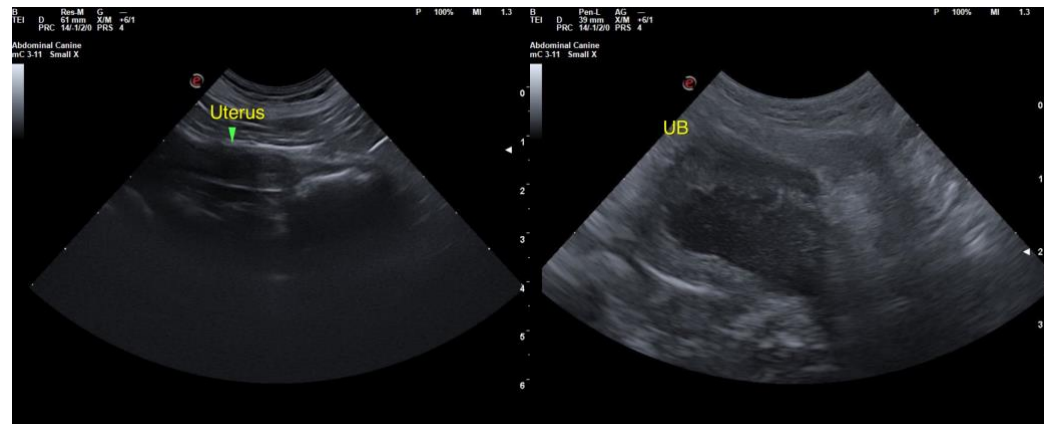
Dr. Louise Mandeville

**INVOICE**

16087

**DATE**

6/14/22





**PATIENT**

Lulu Nimms

**SPECIES**

Canine

**BREED**

Pekingese

**SEX**

Intact Female

**AGE**

12 Years

**WEIGHT**

18.5 Pounds

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Louise Mandeville

**HOSPITAL NAME**

Bettervet

**REFERRING VET**

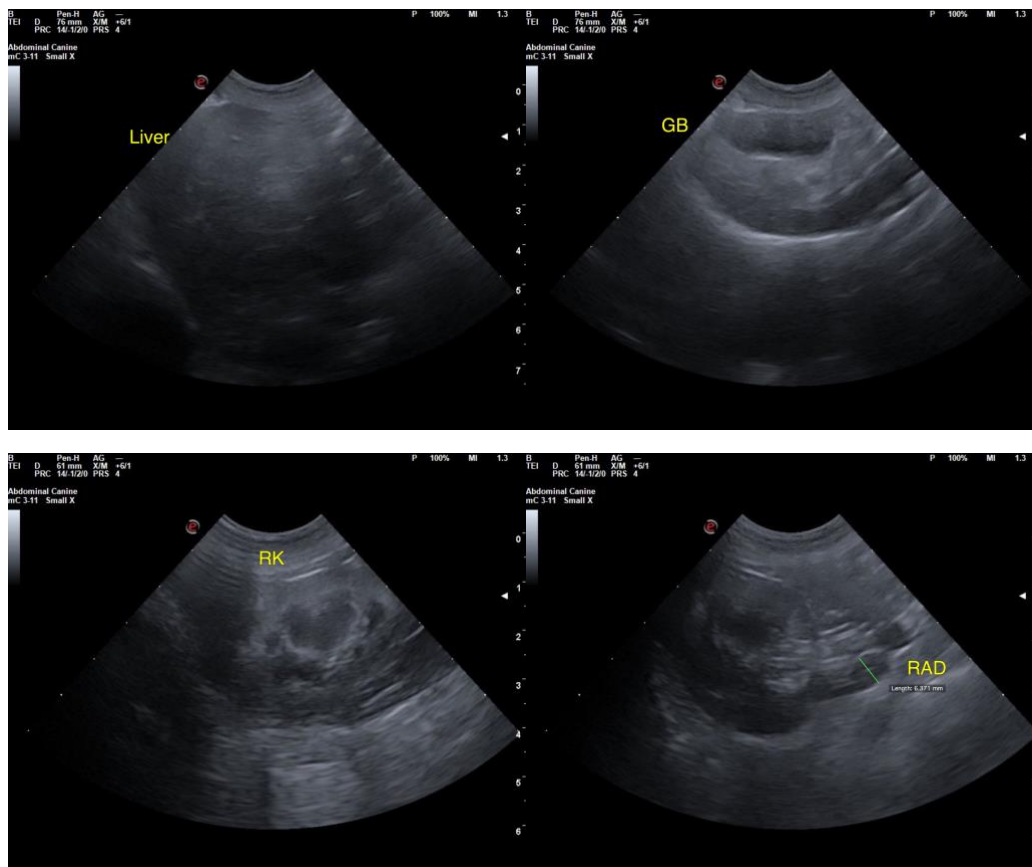
Dr. Louise Mandeville

**INVOICE**

16087

**DATE**

6/14/22



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