



**PATIENT**

Mac Curran

**PRESENTING CLINICAL SIGNS**

Recurrent Uti. History of hepatic cyst.  
Abnormal PE/Chem/CBC/UA Results: recurrent E.coli urinary infection.

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

**BREED**

Doodle

At the end of the study, there are several videos with a slightly anechoic appearing structure that is believed to be the urinary bladder. It is filled with echogenic debris and not very full, making it difficult to fully evaluate. If the structure in question is the urinary bladder, the visible wall appears normal without evidence of infiltrative disease.

**SEX**

Neutered Male

The prostate is unable to be visualized in these images.

The right kidney is normal in size (6.89 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

**AGE**

15 Years

The left kidney is normal in size (5.8 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

**WEIGHT**

52 Pounds

**Adrenal Glands**

The area of the right adrenal gland is examined without evident pathology.

The caudal pole of the left adrenal gland is visualized and is mildly enlarged with normal shape and corticomedullary distinction, measuring 0.95 cm thick.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**Spleen**

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

**IMAGING PERFORMED BY**

Dr. Louise Mandeville

**Liver**

The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. A 5.0 cm x 6.0 cm heterogeneous, largely fluid-filled mass is noted in the left caudal liver. Visible vasculature and biliary tree appear normal without distension or congestion.

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The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

**REFERRING VET**

Dr. Louise Mandeville

**Gastrointestinal**

**INVOICE**

42466

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with very echogenic reverberation artifact from intraluminal gas. There is no evidence of obstruction, foreign material or infiltrative disease; however, complete visualization of far wall is partially inhibited by gas. Pyloric outflow tract appears patent.

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The visible small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is mildly distended with echogenic



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non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

**SPECIES**

Canine

**Pancreas**

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

**BREED**

Doodle

**Free Abdomen**

There is no evidence of free peritoneal effusion noted in these images.

**SEX**

Neutered Male

There is no apparent lymphadenopathy noted in these images.

**ULTRASONOGRAPHIC FINDINGS**

**AGE**

15 Years

- Heterogeneous, largely fluid-filled liver mass – This may represent the reported historical liver cyst. However, if it is a cyst, it is a complicated cyst and/or an infected cyst, or potentially abscess or hematoma. A fluid-filled or cavitated or even necrotic mass cannot be ruled out.

**WEIGHT**

52 Pounds

- Left adrenomegaly – Differentials include likely adrenal hyperplasia, maybe secondary to pituitary dependent hyperadrenocorticism. However, an adrenal adenoma cannot be ruled out.
- The urinary bladder is difficult to fully evaluate, yet appears to contain a moderate to large amount of echogenic debris.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Given this patient's history of chronic urinary tract infections, recommendations are to culture the urine and begin a treatment course based on culture and sensitivity results, and treat as a complicated urinary tract infection, meaning a 4-6 week long course of antibiotics, including a second culture a week to 10 days after starting antibiotics, and a final culture a week to 10 days after finishing antibiotics to ensure no secondary bugs are growing mid treatment after handling the primary bacteria, and to ensure full clearance with treatment duration. If after that, the urinary tract infection returns, a full metabolic screening in the form of a CBC/Chem panel and electrolytes would be recommended to evaluate for possible underlying causes of immunosuppression, if not recently evaluated.

**IMAGING PERFORMED BY**

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Given the mild adrenomegaly, hyperadrenocorticism could be the cause for underlying or recurrent urinary tract infections. If clinical signs of hyperadrenocorticism are present, testing could be considered in the form of a low-dose Dexamethasone suppression test.

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Dr. Louise Mandeville

However, the primary pathology visible in these images is the cystic liver mass, and recommendations include sampling of the mass for both cytology as well as culture and sensitivity to rule out hepatic abscess or even infiltrative neoplasia.

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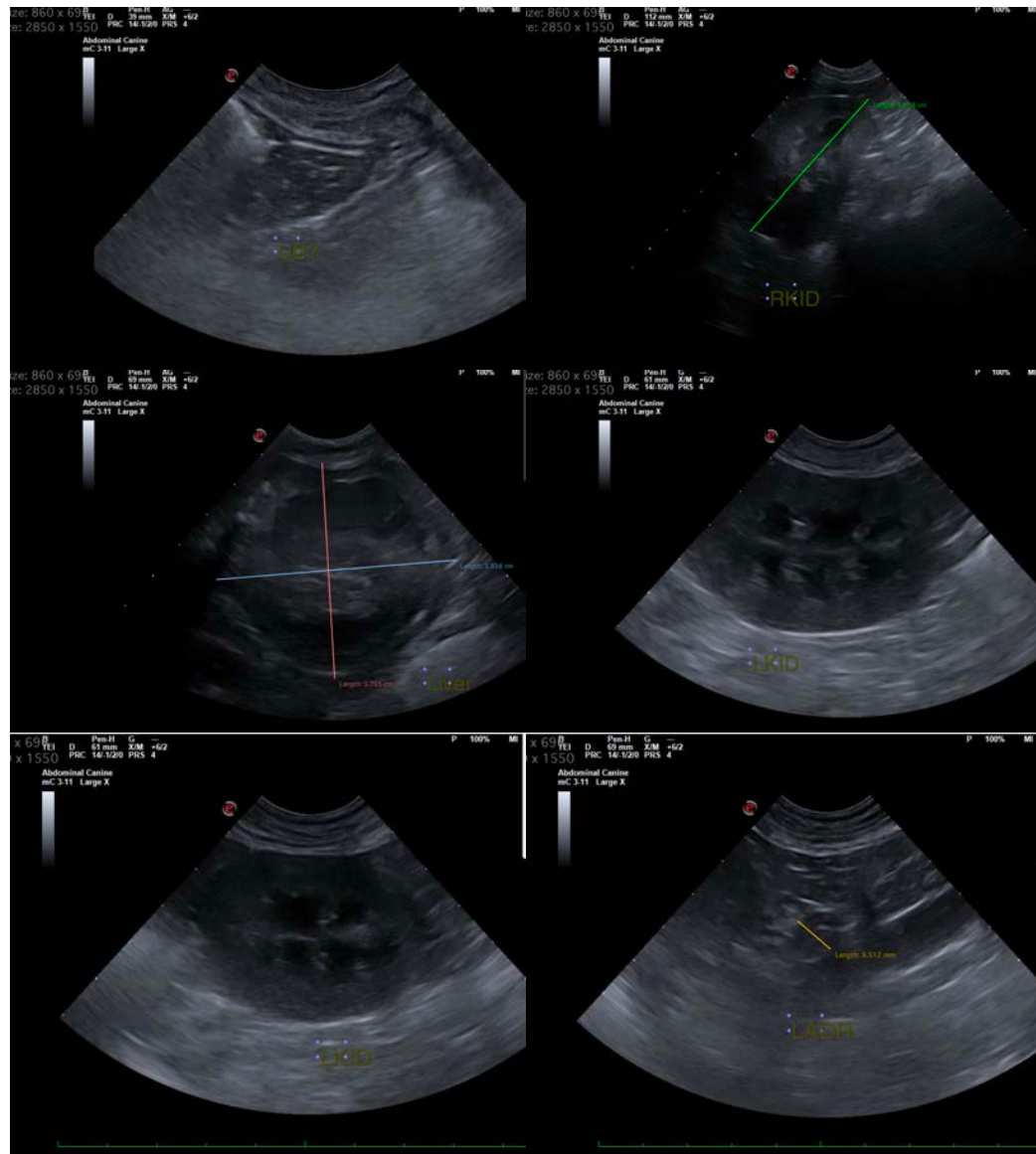
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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