

**PATIENT**

Hannah McGuire

**SPECIES**

Canine

**BREED**

Border Collie Mix

**SEX**

Spayed Female

**AGE**

07/09/2009

**WEIGHT**

17.73 kg

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**IMAGING  
PERFORMED BY**

Loetitia Saint-Jacques,  
LVT

**HOSPITAL NAME**

Luxe Pet Vet

**REFERRING VET**

Dr. Kristin Kee

**INVOICE**

10306

**DATE**

7-12-23

**PRESENTING CLINICAL SIGNS**

Patient presented to urgent care for consultation for single, short-lived seizure episode last week while camping and since then patient has been exhibiting pollakiuria and hematuria. Baseline blood work revealed hemoconcentration, elevated ALT and BUN, and slight hyperalbuminemia. Urinalysis revealed hematuria, pyuria, mild isosthenuria (1.028), and bacteriuria (urine culture and sensitivity pending). SDMA WNL. Patient was started on amoxicillin while waiting for urine culture results and urinary clinical signs have improved since. Patient has no relevant medical history with this clinical presentation. Upon exam, patient has multiple diffuse soft SQ masses, mild periodontal disease, and nuclear sclerosis.

Abnormal PE/Chem/CBC/UA Results: LABs attached.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder is moderately distended with anechoic urine. The Bladder wall appears diffusely mildly thickened and irregular measuring at 0.42 cm. The region of the trigone appears normal with no calculi or mass lesions. The distal ureter is prominent and slightly dilated measuring 0.22 cm.

The left kidney has a normal shape and size (5.23 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex: medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or. Renal vasculature is normal.

The right kidney has a normal shape and size (6.17 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or. Renal vasculature is normal.

**Adrenal Glands**

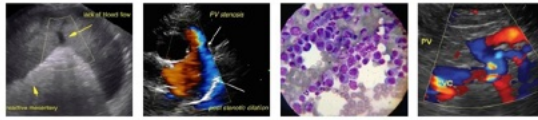
The left adrenal gland is normal in size measuring 0.77 cm at the cranial pole and 0.77 cm at the caudal pole and 2.13 cm in length. It is visualized in its normal position cranial to the left renal artery. It is abnormal in appearance in that there is a hyperechoic nodule in the cranial pole of the left adrenal measuring 0.6 cm x 0.53 cm which does not appear to deviate the margins of the adrenal.

The right adrenal gland is normal in size measuring 0.63 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

**Spleen**

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

**Liver**



**PATIENT**

Hannah McGuire

**SPECIES**

Canine

**BREED**

Border Collie Mix

**SEX**

Spayed Female

**AGE**

07/09/2009

**WEIGHT**

17.73 kg

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**IMAGING  
PERFORMED BY**

Loetitia Saint-Jacques,  
LVT

**HOSPITAL NAME**

Luxe Pet Vet

**REFERRING VET**

Dr. Kristin Kee

**INVOICE**

10306

**DATE**

7-12-23

The liver is large in size and normal in echogenicity but is irregular. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. There are too numerous to count ill-defined hypoechoic nodules throughout the hepatic parenchyma varying in size from 0.75 cm to 2 cm. Additionally, there is a hypoechoic mixed echogenicity mass effect measuring 4.24 cm x 3.28 cm.

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

**Gastrointestinal**

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis: mucosa layer ratio. The duodenum measured as normal (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

**Pancreas**

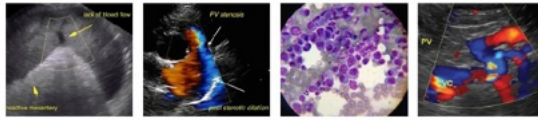
The pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

**Free Abdomen**

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

**PRIMARY FINDINGS**

- Thicken irregular urinary bladder wall with mild distal ureteral dilation. Findings are most consistent with bacterial cystitis. Correlate with urinalysis and culture results. There is no obvious obstruction of the ureter visualized. This could be associated with early pyelonephritis.
- Hyperechoic nodule in the cranial pole of the left adrenal this nodule is relatively small and is not appeared to be significantly deviating the shape of the adrenal, increasing the likelihood that this is a benign lesion such as an adenoma, hyperplasia etc., an early neoplastic lesion cannot be ruled out. Recommend continued monitoring.
- Large heterogenous nodular liver with occasional mixed echogenicity mass lesions. The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other



**PATIENT**

Hannah McGuire

hepatopathy. While typically the diffused nature of the hypoechoic nodules trends to benign etiology these are slightly larger and more prominent so there is increase concern for underlying neoplastic process.

**SPECIES**

Canine

- Moderate gallbladder debris. The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting but seems unlikely to be causing a current issue. Recommend continued monitoring.

**BREED**

Border Collie Mix

**SEX**

Spayed Female

**AGE**

07/09/2009

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The gallbladder wall thickened and irregular these findings are most consistent with cystitis, which is likely the source of the hematuria and pollakiuria described. Recommend continued use of antibiotics according to your C/S results. Consider reevaluation of the urinary bladder after treatment to ensure that the bladder wall normalizes and there are no focal lesions visualized. Additionally, based on the azotemia and the mildly dilated distal ureter consider a longer course of treatment for possible concurrent pyelonephritis.

**WEIGHT**

17.73 kg

There is a hyperechoic nodule visualized on the left adrenal, the size, and appearance of this nodule trends towards a benign etiology. Recommend a blood pressure evaluation. If hypertension is present, you could consider measuring catecholamine levels. Recommend continued monitoring with ultrasound for progression of this lesion.

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

The liver is irregular and nodular with some larger nodules creating small mass lesions. While typically when there are numerous hypoechoic nodules, the appearance trends towards more benign etiology. These nodules deviate the hepatic margins somewhat and are slightly larger (trending towards 2 cm in size) which is concerning. Recommend a fine aspirate of a liver nodule or two and continue monitoring.

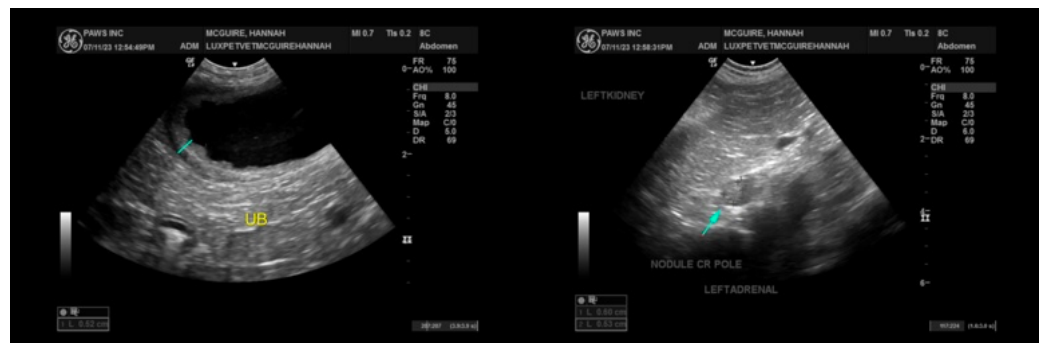
Additionally, recommend three-view thoracic radiographs.

**IMAGING PERFORMED BY**

Loetitia Saint-Jacques,  
LVT

**HOSPITAL NAME**

Luxe Pet Vet



**REFERRING VET**

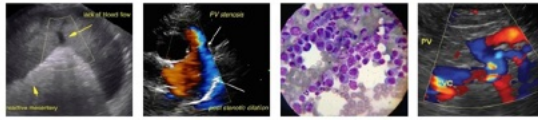
Dr. Kristin Kee

**INVOICE**

10306

**DATE**

7-12-23



**PATIENT**

Hannah McGuire

**SPECIES**

Canine

**BREED**

Border Collie Mix

**SEX**

Spayed Female

**AGE**

07/09/2009

**WEIGHT**

17.73 kg

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**IMAGING PERFORMED BY**

Loetitia Saint-Jacques,  
LVT

**HOSPITAL NAME**

Luxe Pet Vet

**REFERRING VET**

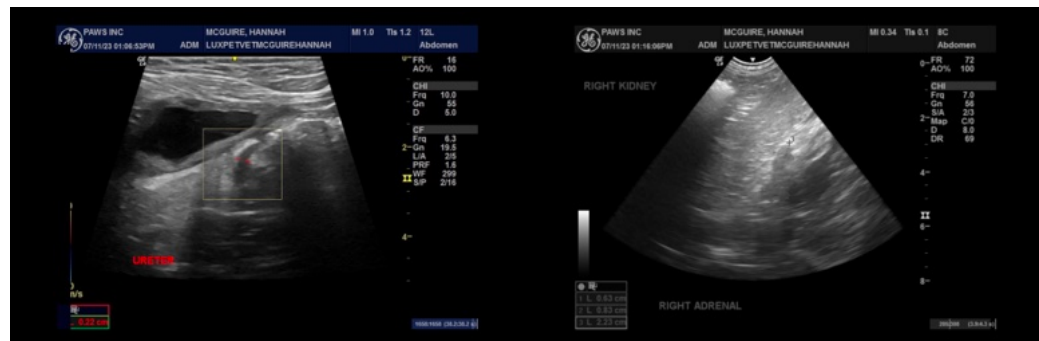
Dr. Kristin Kee

**INVOICE**

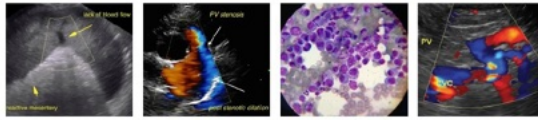
10306

**DATE**

7-12-23



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.



**PATIENT**

Hannah McGuire

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.

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small animal Internal Medicine)

**SPECIES**

Canine

info@sonopath.com

**BREED**

Border Collie Mix

**SEX**

Spayed Female

**AGE**

07/09/2009

**WEIGHT**

17.73 kg

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**IMAGING  
PERFORMED BY**

Loetitia Saint-Jacques,  
LVT

**HOSPITAL NAME**

Luxe Pet Vet

**REFERRING VET**

Dr. Kristin Kee

**INVOICE**

10306

**DATE**

7-12-23