

**PATIENT**

Tobi Urbach

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Spayed Female

**AGE**

18 Years

**WEIGHT**

10.4 Pounds

**INTERPRETED BY**

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

**IMAGING  
PERFORMED BY**

Desen Ertunc

**HOSPITAL NAME**

Healing Spirit

**REFERRING VET**

Dr. Sarah Green

**INVOICE**

33804

**DATE**

12/28/21

**PRESENTING CLINICAL SIGNS**

Adopted 2 days prior from rescue, was surrendered to rescue 8 months prior with no medical history. Has been hyporexic and lethargic since adoption, suspected PU/PD with no defecation, no vomiting. Abnormal PE/Chem/CBC/UA Results: P.E.- BCS 6/9, Mild generalized muscle atrophy. No intra-oral ulcers. U/A: U.S.G.= 1.012, pH= 5.5, Protein < 15 mg/dL. Sediment- rare RBCs, TNTC WBCs with 3+ rods and filamentous organisms Urine culture pending CBC: Lym= 0.71 (1.5-7) Hgb= 7.5 (8-15), MCHC= 29 (30-36), MPV= 10 (12-17), otherwise WNL. Chem: BUN= 84 (10-30), Creatinine= 4.1 (0.3-2.1), Amy= 1147 (300-1100), K= 3.6 (3.7-5.8), otherwise WNL. T4= 2.2 (1.5-4.8) feline PL= 2.9 (<3.5 in normal range)

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The left kidney has a normal shape and size (2.7 cm) with very mild pyelectasia at 0.1 cm. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal in size (3.5 cm) and irregular in shape with pyelectasia at 0.24 cm. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.22 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The region of the right adrenal (between right cranial kidney and vena cava) is unremarkable, but the adrenal is not distinctly visualized. No evidence of a mass effect.

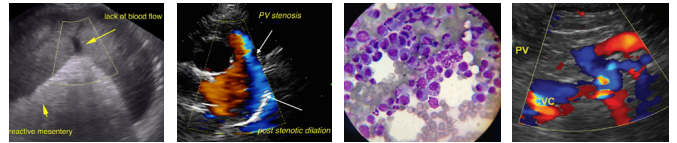
**Spleen**

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**

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There are at least two irregular, hyperechoic cystic/mothaten appearing mass effects, one measuring 1.7 cm in diameter, the other measuring 2.1 cm in diameter.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.



**PATIENT**

***Gastrointestinal***

Tobi Urbach

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.36cm 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.

**SPECIES**

Feline

The visualized areas of duodenum, jejunum and ileum have a uniform diameter with minimal fluid distension. Wall thickness is normal to slightly increased. Bowel loops follow a typical curvilinear path with distinct wall layering, but some areas display a prominent muscularis layer which does not display the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measured 0.35 cm. Some focal areas of bowel corrugation are visualized, consistent with inflammation. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

**BREED**

DSH

**SEX**

Spayed Female

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***

**AGE**

18 Years

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***

**WEIGHT**

10.4 Pounds

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There are prominent mesenteric lymph nodes in the area of the ileocecal junction, measuring 0.27 cm, 0.25, and 0.28 cm. The omentum is of normal echogenicity.

**PRIMARY FINDINGS**

**INTERPRETED BY**

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

- Decreased corticomedullary distinction in both kidneys with mild pyelectasia – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. Pyelectasia of the left/right kidney could be consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other.

**IMAGING PERFORMED BY**

Desen Ertunc

- Heterogeneous liver with hyperechoic cystic mass lesions – These lesions could be consistent with benign or cancerous lesions. A fine needle aspirate could be considered but may be difficult to get a good sample with the cystic nature of the lesions.

**HOSPITAL NAME**

Healing Spirit

- Mildly thickened, corrugated areas of bowel with diffusely prominent muscularis layer – The small intestinal wall changes are most consistent with an inflammatory process (i.e., inflammatory bowel disease) with a low possibility of emerging lymphoma.

**REFERRING VET**

Dr. Sarah Green

**SECONDARY FINDINGS**

- Prominent mesenteric lymph nodes – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

**INVOICE**

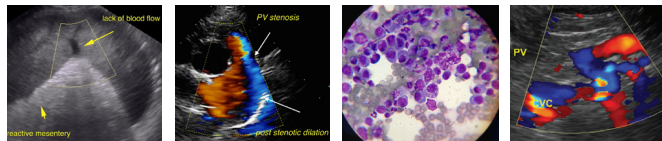
33804

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**DATE**

12/28/21

The changes visualized associated with the kidneys are likely consistent with chronic, longstanding renal disease, but there is mild bilateral pyelectasia, so I would treat this case as a pyelonephritis case. Consider cytology on the urine if the filamentous organisms persist to try to identify what you're dealing



**PATIENT**

with. Recommend blood pressure evaluation.

Tobi Urbach

Additionally, I suspect there could be some primary GI issues occurring. There are some corrugated bowel loops that appear irritated, and mildly thickened bowel loops with a prominent muscularis layer. These changes could be consistent with uremia and inflammation, but if chronic GI symptoms are present, then you could consider further evaluation (GI panel, hydrolyzed diet, GI biopsies, etc.).

**SPECIES**

Feline

There are at least two irregular, hyperechoic cystic masses visualized in the liver. In general, cystic lesions tend to be slightly more benign, but a biopsy of these lesions would be necessary to know definitively. If surgical resection is considered, then recommend a contrast CT scan to further evaluate extent of the lesions and for surgical planning. If surgical removal will not be considered, then consider a fine needle aspirate of the lesions and continued monitoring.

**BREED**

DSH

**SEX**

Recommend 3-view thoracic radiographs.

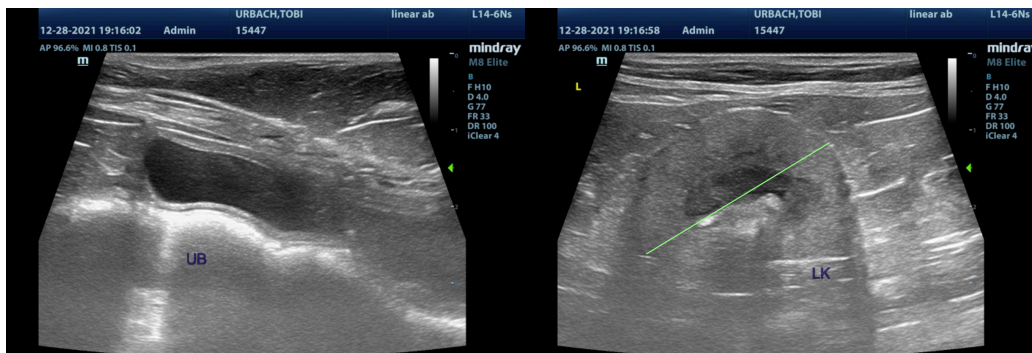
Spayed Female

**AGE**

18 Years

**WEIGHT**

10.4 Pounds

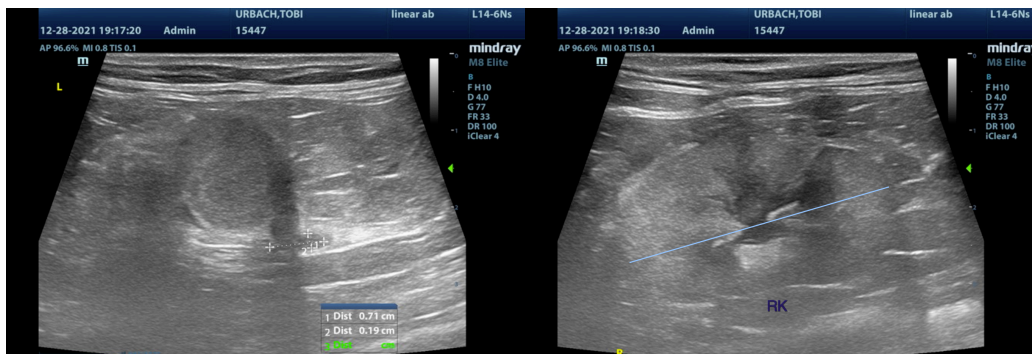


**INTERPRETED BY**

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

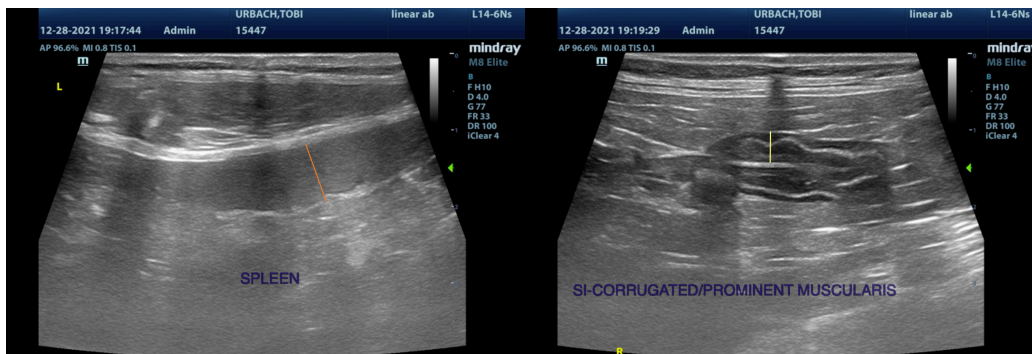
**IMAGING PERFORMED BY**

Desen Ertunc



**HOSPITAL NAME**

Healing Spirit



**REFERRING VET**

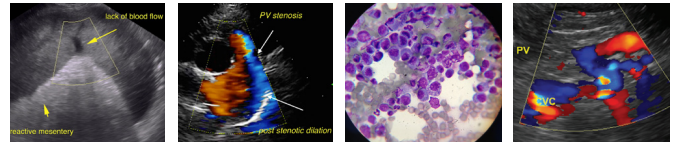
Dr. Sarah Green

**INVOICE**

33804

**DATE**

12/28/21



**PATIENT**

Tobi Urbach

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Spayed Female

**AGE**

18 Years

**WEIGHT**

10.4 Pounds

**INTERPRETED BY**

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

**IMAGING  
PERFORMED BY**

Desen Ertunc

**HOSPITAL NAME**

Healing Spirit

**REFERRING VET**

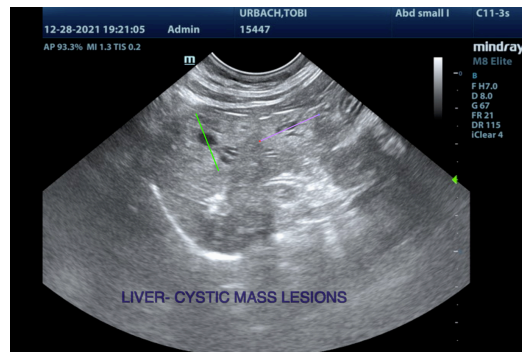
Dr. Sarah Green

**INVOICE**

33804

**DATE**

12/28/21



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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)  
kathleen.sennello@sonopath.com