



**PATIENT**

Pip Murack

**SPECIES**

Feline

**BREED**

Domestic Shorthair

**SEX**

Neutered male

**AGE**

13 years

**WEIGHT**

7.8 lbs

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

A Murphy CVT

**HOSPITAL NAME**

Wauwautosa VC

**REFERRING VET**

Dr. Binor

**INVOICE**

92686

**DATE**

10/27/21

**PRESENTING CLINICAL SIGNS**

History: History of significant weight loss since 2018. Not on any medications. Likes dry food despite missing majority of dentition. has a grade 2/6 heart murmur. Calculus on #408 tooth, otherwise unremarkable mouth. Imaging to check for cause of significant weight loss. Bloodwork indicated renal disease, but want to rule out neoplasia or other etiology. Check status of kidneys.  
Bloodwork from 10/22/2021: BUN 49 (16-37), Creatinine 2.2 (0.9-2.3), SDMA 17 (0-14), HgB 9.5 (10.3-16.2), RBC's 6.83 (7.12-11.46). Planning to check UA and the rest of the CBC/Chem/T4 was unremarkable.

**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 (3.67 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 pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (3.72 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 pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**Adrenal Glands**

The region of left adrenal (Cranial to left renal artery) is unremarkable but the adrenal is not distinctly visualized. 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 were numerous, moderate sized shadowing, hyperechoic mineralizations within the hepatic parenchyma/hepatic biliary ducts. The gallbladder



**PATIENT**

Pip Murack

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

**SPECIES**

Feline

**Gastrointestinal**

The stomach contains minimal luminal contents. It measures at a normal thickness of 0.58 cm 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.

**BREED**

Domestic Shorthair

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 and the jejunum measured as normal (0.24 cm). Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

**SEX**

Neutered male

**AGE**

13 years

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.

**WEIGHT**

7.8 lbs

**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.

**INTERPRETED BY**

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

**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.

**IMAGING PERFORMED BY**

A Murphy CVT

**ULTRASONOGRAPHIC FINDINGS**

**PRIMARY FINDINGS:**

**HOSPITAL NAME**

Wauwautosa VC

- Mildly reduced corticomedullary distinction in both kidneys with hyperechoic echogenicity. Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis.

**REFERRING VET**

Dr. Binor

- Intrahepatic mineralization. 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 hepatopathy. The significance of this is unclear. No obstructions were visualized associated with the biliary tract so this could be incidental or an indicator of hepatobiliary disease.

**INVOICE**

92686

**DATE**

10/27/21



**PATIENT**

Pip Murack

**SPECIES**

Feline

**BREED**

Domestic Shorthair

**SEX**

Neutered male

**AGE**

13 years

**WEIGHT**

7.8 lbs

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

A Murphy CVT

**HOSPITAL NAME**

Wauwautosa VC

**REFERRING VET**

Dr. Binor

**INVOICE**

92686

**DATE**

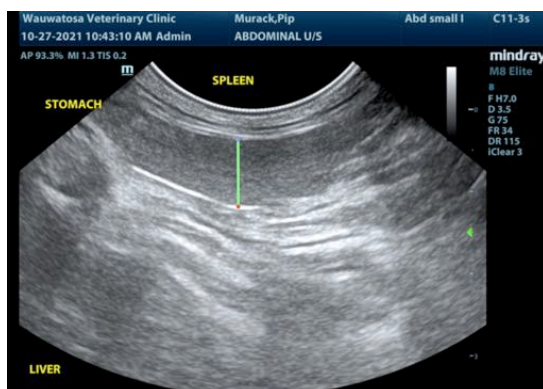
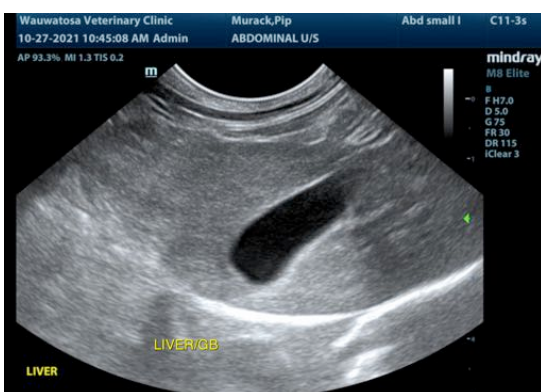
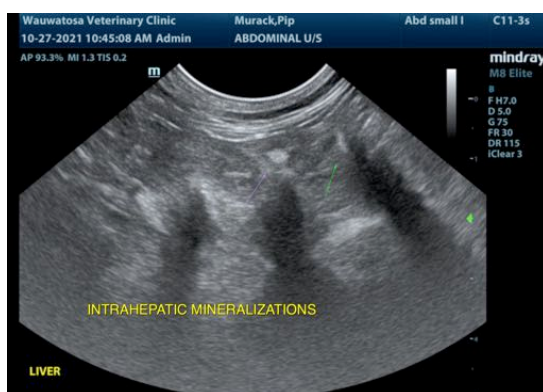
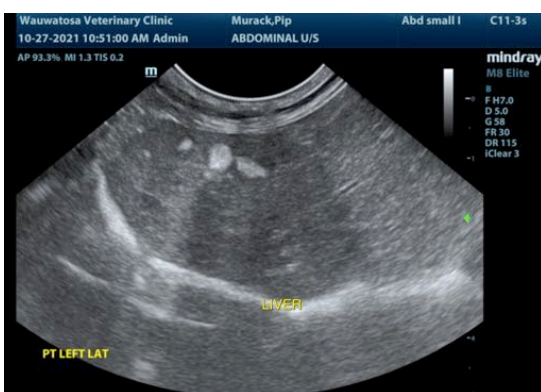
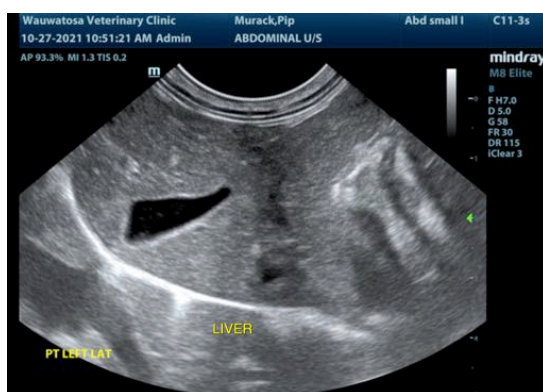
10/27/21

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

No large focal lesions were observed to explain the weight loss reported. There was some mineralization in the liver. If the liver enzymes are elevated then consider FNA of the liver, liver function test and further evaluation for liver disease. If the liver values are normal this should be monitored.

There is renal disease present. This very likely could be responsible for the weight loss reported. I recommend urinalysis, culture and blood pressure evaluation +/- urine protein to creatinine ratio.

Occasionally occult weight loss is due to underlying GI disease. No indication of this was given based on today's scan, but you can consider a GI panel if other avenues are not helpful. I recommend three view thoracic radiographs to evaluate for concurrent intrathoracic disease.





**PATIENT**

Pip Murack

**SPECIES**

Feline

**BREED**

Domestic Shorthair

**SEX**

Neutered male

**AGE**

13 years

**WEIGHT**

7.8 lbs

**INTERPRETED BY**

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

**IMAGING  
PERFORMED BY**

A Murphy CVT

**HOSPITAL NAME**

Wauwautosa VC

**REFERRING VET**

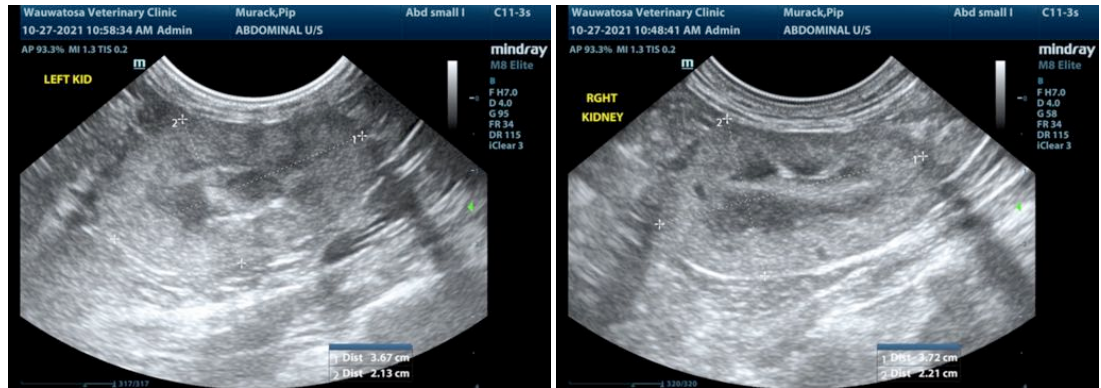
Dr. Binor

**INVOICE**

92686

**DATE**

10/27/21



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