

**PATIENT PRESENTING CLINICAL SIGNS**

Maddie Graham X-rays for the full feeling abdomen and pulling hair out of belly to make sure there isn't any obvious problems. RADS: large spleen, thickened GI

**SPECIES**

Feline

Abnormal PE/Chem/CBC/UA Results: Labwork being sent out this evening ( 8/9/23)

**BREED**

DSH

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

**SEX**

Spayed Female

The urinary bladder is moderately distended with mild primarily suspended echogenic debris present. 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 calculi. Echogenic debris of this type can be associated with small crystals, cellular debris and proteinaceous debris.

**AGE**

9 Years

The left kidney has a normal shape and size (3.59 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 hydroureter. Renal vasculature is normal.

**WEIGHT**

3.7 kg

The right kidney has a normal shape and size (3.53 cm) with numerous cortical cysts, one of which measures 0.54 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 hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

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

**Adrenal Glands**

**IMAGING PERFORMED BY**

Loetitia Saint-Jacques,  
LVT

The left adrenal gland is normal in size measuring 0.30 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 right adrenal gland is normal in size measuring 0.37 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.

**HOSPITAL NAME**

Pine Creek VC

**Spleen**

The spleen is subjectively normal in size (1.0 cm), 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.

**REFERRING VET**

Dr. Rebholtz

**Liver**

**INVOICE**

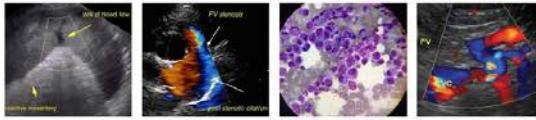
44534

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. There is an area of abnormal, ill defined, hyperechoic tissue visualized in the region of the gall bladder near the base of the cystic duct. This tissue is concerning for a possible irregularly margined mass effect.

**DATE**

8/9/23

The gallbladder appears to be folded. In many views, the gallbladder appears moderately distended with largely anechoic material and a normal gallbladder wall, in other views there is the suggestion of some



**PATIENT**

Maddie Graham

intraluminal debris. Visible areas of bile duct appear slightly prominent and tortuous with mild dilation, measuring at 0.29 cm. No obvious obstruction is visualized.

**Gastrointestinal**

**SPECIES**

Feline

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.

**BREED**

DSH

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. Jejunum wall measures 0.22 cm.

**SEX**

Spayed Female

Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

**AGE**

9 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.

**Pancreas**

**WEIGHT**

3.7 kg

The pancreas (particularly the left limb) is prominent and mottled compared to the surrounding isoechoic 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. There is an occasional prominent mesenteric lymph node visualized, examples of which measure at 0.48 cm and 0.30 cm. The omentum is generally of normal echogenicity.

**IMAGING PERFORMED BY**

Loetitia Saint-Jacques,  
LVT

**PRIMARY FINDINGS**

- Echogenic debris visualized in the urinary bladder – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus.
- Prominent, mottled left limb of the pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Mildly prominent mesenteric lymph nodes – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.
- Irregular, poorly defined, abnormal hyperechoic tissue near the gall bladder-findings are concerning for a mass effect. Possible differentials could include-biliary carcinoma, adenoma, other.

**HOSPITAL NAME**

Pine Creek VC

**REFERRING VET**

Dr. Rebholtz

**INVOICE**

44534

**SECONDARY FINDINGS**

- Numerous small cortical cysts visualized in both kidneys – The bilateral renal findings are consistent with age-related change.

**DATE**

8/9/23



**PATIENT**

Maddie Graham

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Spayed Female

**AGE**

9 Years

**WEIGHT**

3.7 kg

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Loetitia Saint-Jacques,  
LVT

**HOSPITAL NAME**

Pine Creek VC

**REFERRING VET**

Dr. Rebholtz

**INVOICE**

44534

**DATE**

8/9/23

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

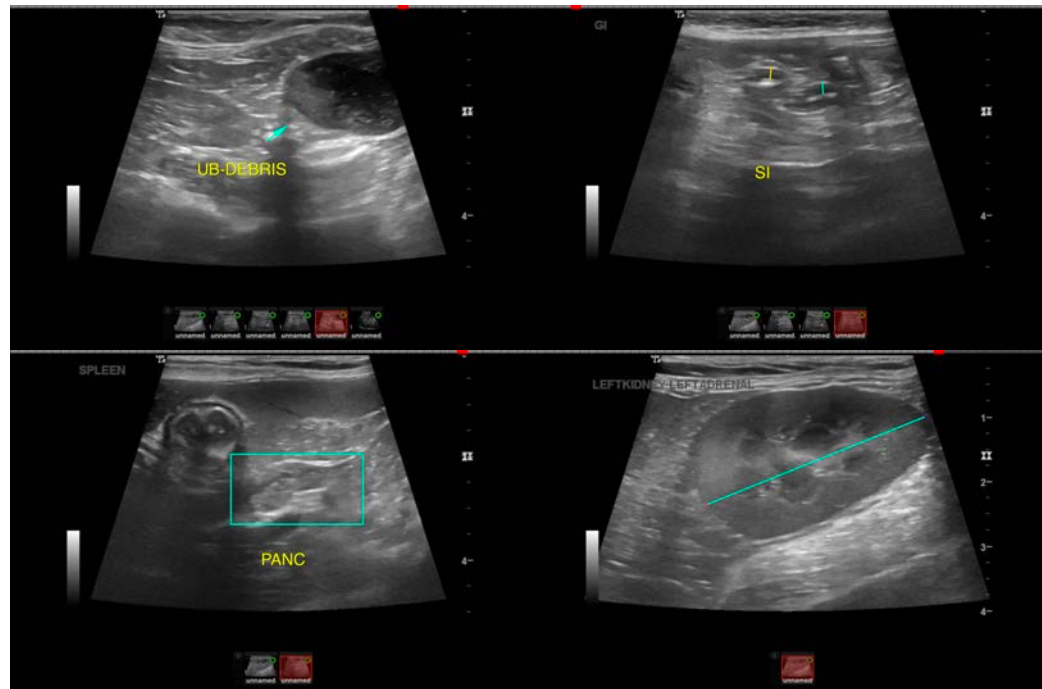
There is a moderate amount of suspended echogenic debris visualized in the urinary bladder. Recommend a urinalysis and culture to further investigate.

The pancreas appears somewhat prominent and mottled in the left limb. This could be consistent with very mild active inflammation or previous episodes of inflammation. Correlate these findings with a quantitative fPLI level.

The appearance of the gall bladder region is atypical/abnormal. The gall bladder almost has a “double-lumen” effect but the positioning of the cystic duct suggests this is due to folding of the gall bladder.

There is some irregularly marginated, poorly defined hyperechoic tissue in this region creating the impression of a poorly defined mass. This could be concerning for an early biliary carcinoma, adenoma, etc.. less likely fibrosis, parenchymal remodeling etc.. Consider a contrast CT scan to better evaluate this area and to try and determine if surgical intervention would be recommended. A fine needle aspirate of this area would likely be very challenging. Color mapping of the area with ultrasound and patient sedation could also improve visualization.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.





**PATIENT**

Maddie Graham

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Spayed Female

**AGE**

9 Years

**WEIGHT**

3.7 kg

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Loetitia Saint-Jacques,  
LVT

**HOSPITAL NAME**

Pine Creek VC

**REFERRING VET**

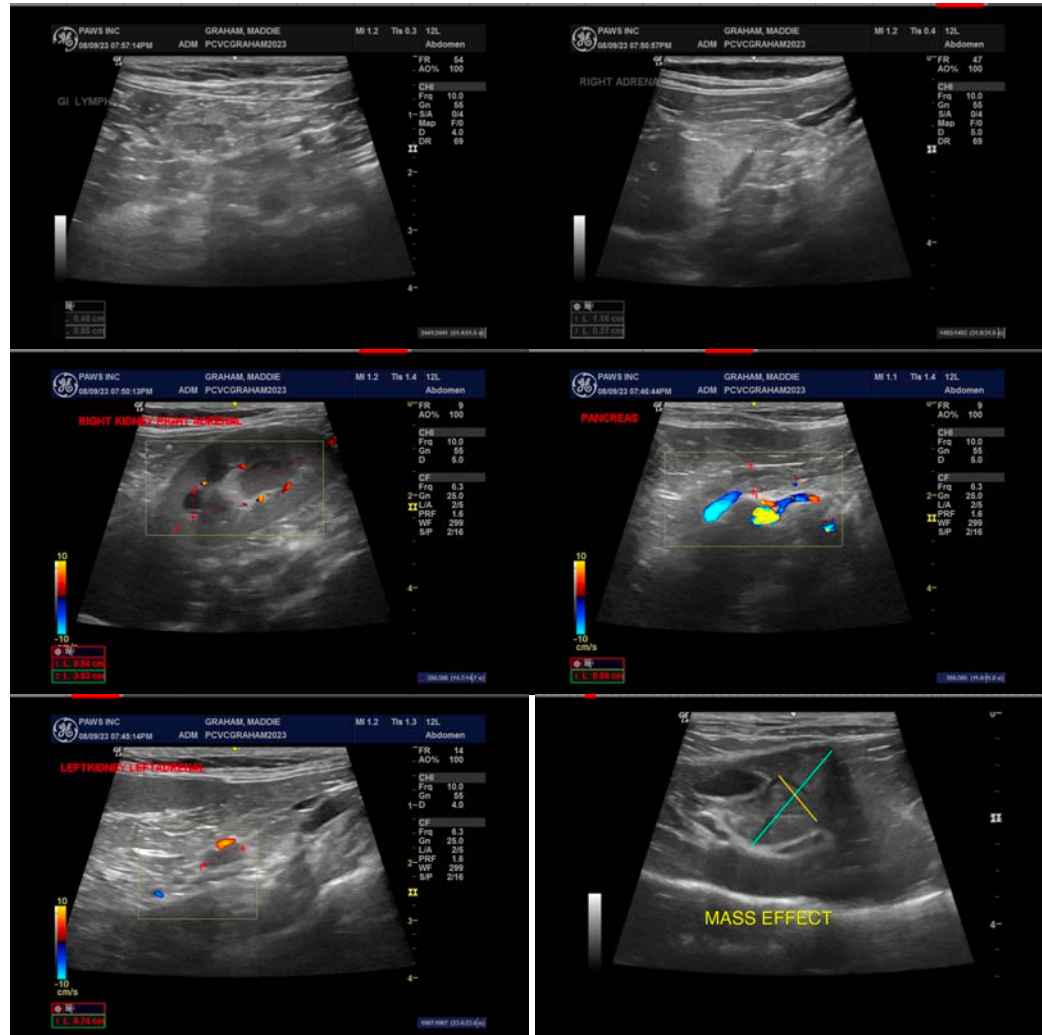
Dr. Rebholtz

**INVOICE**

44534

**DATE**

8/9/23



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.

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)

info@sonopath.com