



**PATIENT PRESENTING CLINICAL SIGNS**

Princess Amadruto 13 yo FS DSH, history of Stage 2 CKD and weight loss. U/S to determine is weight loss and chronic vomiting are due to renal disease vs. other.  
Abnormal PE/Chem/CBC/UA Results: Creatinine: 2.0 SDMA: 20, BUN 23

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Feline

**Urinary System**

Urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

**BREED**

DLH

The left kidney is normal in size (3.07 cm) and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased echogenicity and mild loss of corticomedullary distinction. There is no evidence of pyelectasia, mineral (unless described separately) or infarcts observed.

**SEX**

Spayed Female

The right kidney is normal in size (3.42 cm) and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased echogenicity and mild loss of corticomedullary distinction. There is no evidence of pyelectasia, mineral (unless described separately) or infarcts observed.

**AGE**

13 Years

**Adrenal Glands**

Right adrenal gland is normal in size (1.0 cm long x 0.32 cm thick), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**WEIGHT**

9.9 Pounds

Left adrenal gland is normal in size (0.8 cm long x 0.45 cm thick), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**Spleen**

The spleen is not well visualized in these images. However, there is no pathology noted in the area of the spleen.

**Liver**

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. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

**HOSPITAL NAME**

Long Branch AH

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. Elaina Petrone

**Gastrointestinal**

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

**INVOICE NUMBER**

34158

The visible small intestines are normal in wall thickness. Normal layering is maintained except for a diffusely disproportionately thick muscularis layer relative to mucosa. Small intestinal motility

**DATE**

1/12/22



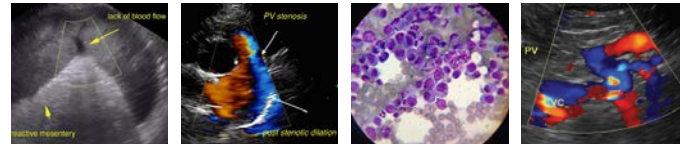
<b>PATIENT</b>	appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.
Princess Amadruto	The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.
<b>SPECIES</b>	<b>Pancreas</b>
Feline	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.
<b>BREED</b>	<b>Free Abdomen</b>
DLH	There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.
<b>ULTRASONOGRAPHIC FINDINGS</b>	
<b>SEX</b>	<ul style="list-style-type: none"> <li>Age related kidney change – This finding is expected/consistent with age-related mild degenerative disease and should be interpreted clinically in combination with laboratory changes.</li> </ul>
Spayed Female	
<b>AGE</b>	<ul style="list-style-type: none"> <li>Thick muscularis – This finding has been reported in cats with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma.</li> <li>The spleen is not well visualized. If it has not been previously removed, it may be small and volume contracted. However, there is no pathology in the area of the spleen.</li> </ul>
13 Years	
<b>WEIGHT</b>	<b><u>INTERPRETATION OF THE FINDINGS &amp; FURTHER RECOMMENDATIONS</u></b>
9.9 Pounds	Recommendations to further assess the weight loss and chronic vomiting as well as the muscularis thickening include a gastrointestinal malabsorption panel including TLI, PLI, folate and cobalamin to Texas A&M GI laboratory. A T4 is also recommended if not previously performed.
<b>INTERPRETED BY</b>	
Beth Johnson, DVM DACVIM	Given the history of chronic kidney disease combined with weight loss, a urinalysis is recommended, and if the sediment is clean but there is protein in the urine, a UPC to quantify the proteinuria and further direct treatment is recommended. If this patient's appetite is poor, recommendations include managing the appetite with possible antiemetics, appetite stimulants, or even fluid therapy in case kidney disease is contributing. However, given the very mild nature of the azotemia, a primary differential for the GI signs is gastrointestinal disease such as infiltrative inflammatory bowel disease. In that case, if the patient is eating well, a diet change to a novel or hydrolyzed protein diet is recommended.
<b>HOSPITAL NAME</b>	
Long Branch AH	
<b>REFERRING VET</b>	Ultimately, biopsies of the GI tract (being sure to include the ileum if possible) may be warranted to get a definitive diagnosis. However, if that is not an option, and diet alone does not help, additional empirical therapy with cobalamin supplementation +/- steroids (being careful to monitor the kidneys in the face of steroids) may be helpful.
Dr. Elaina Petrone	

**INVOICE NUMBER**

34158

**DATE**

1/12/22



**PATIENT**

Princess Amadruto

**SPECIES**

Feline

**BREED**

DLH

**SEX**

Spayed Female

**AGE**

13 Years

**WEIGHT**

9.9 Pounds

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**HOSPITAL NAME**

Long Branch AH

**REFERRING VET**

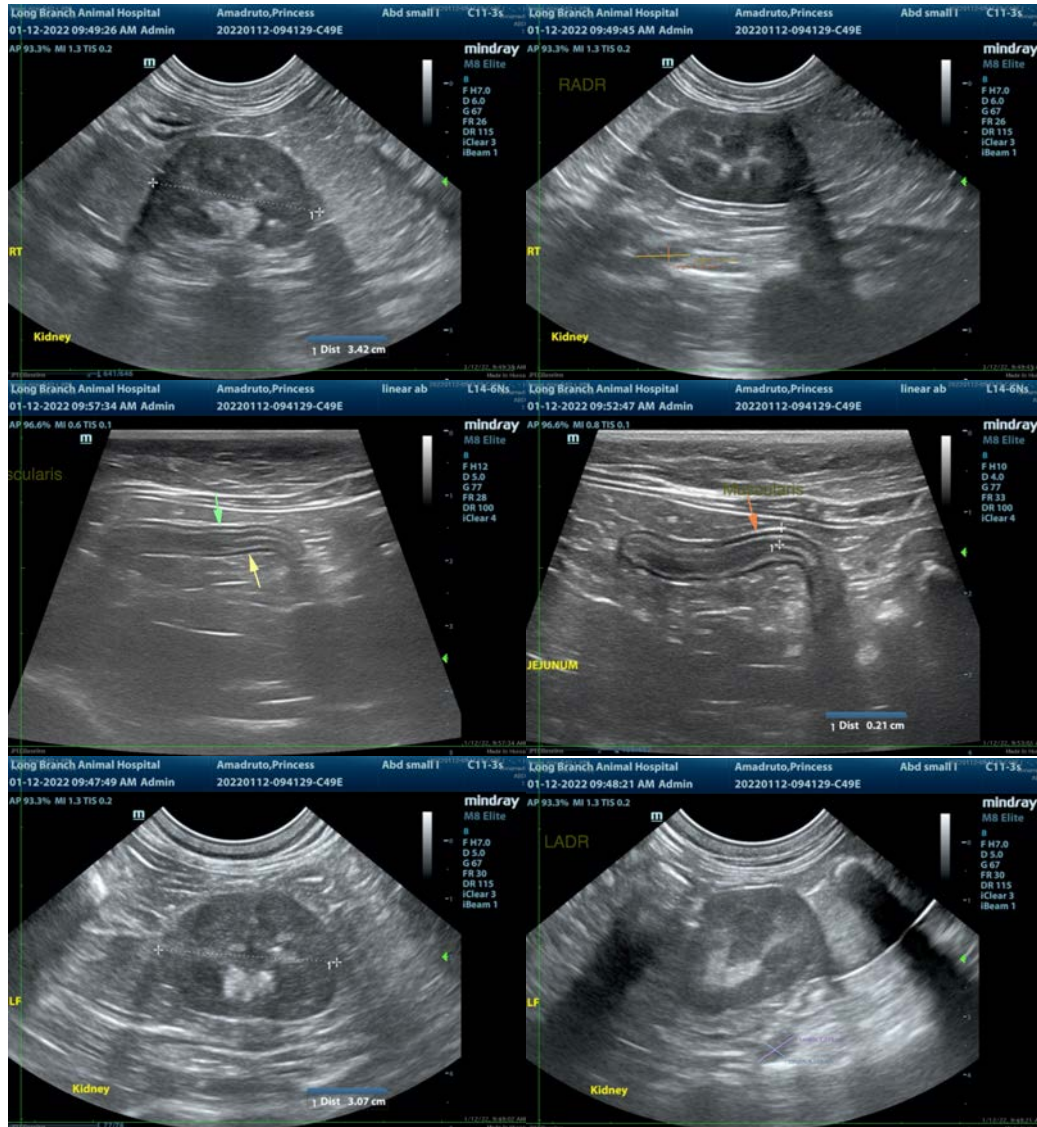
Dr. Elaina Petrone

**INVOICE NUMBER**

34158

**DATE**

1/12/22



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.

**Beth Johnson, DVM, DACVIM**  
Beth.Johnson@sonopath.com