



**PATIENT**

Rebel Diamente

**SPECIES**

Canine

**BREED**

Mixed

**SEX**

Spayed Female

**AGE**

10 Years

**WEIGHT**

34 Pounds

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Elaina Petrone

**HOSPITAL NAME**

Long Branch AH

**REFERRING VET**

Dr. Elaina Petrone

**INVOICE**

37753

**DATE**

5/18/22

**PRESENTING CLINICAL SIGNS**

10 yo FS mixed breed presenting for weight loss, lethargy, and decreased appetite. On PE cranial abdomen tense, painful, and hepatomegaly.  
Abnormal PE/Chem/CBC/UA Results: Elevated ALT, ALP, and amylase. 185, 471, 1236

**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 (6.44 cm). Overall echogenicity is normal with adequate 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 (5.28 cm). Overall echogenicity is normal with adequate 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 left adrenal gland is normal in size measuring 0.71 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 0.60 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**

The liver is large in size and irregular. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There are numerous hypo- and mixed echogenicity nodule visualized throughout the hepatic parenchyma. Many of these nodules deform the margins of the liver. Examples of these nodules measure 1.93 and 1.33 cm, but the majority of them fall into the 1-2 cm size.

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**

Rebel Diamente

**Gastrointestinal**

**SPECIES**

Canine

The stomach is moderately dilated with fluid and irregular shadowing material most consistent with normal ingesta and gas. 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 layering is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

**BREED**

Mixed

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 measured 0.23 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

**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.

**AGE**

10 Years

**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.

**WEIGHT**

34 Pounds

**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.

**INTERPRETED BY**

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

**ULTRASONOGRAPHIC FINDINGS**

- Large, irregular, heterogeneous liver with numerous nodules – 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. There are numerous hyper- and hypoechoic nodules throughout the hepatic parenchyma. These could represent benign lesions (regenerative nodules, etc.), but there is concern for an underlying neoplastic process.

**IMAGING PERFORMED BY**

Dr. Elaina Petrone

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The liver appears heterogeneous and diffusely nodular. These types of changes are difficult to assess, as the appearance of the nodules does not always predict if they are cancerous or not, as regenerative nodules can sometimes appear relatively severe.

**REFERRING VET**

Dr. Elaina Petrone

- Recommend a liver function test.
- Recommend a fine needle aspirate of the liver.
- Recommend 3-view thoracic radiographs.
- If no additional diagnostics are to be performed, you could consider Denamarin and Ursodiol therapy with continued monitoring and addressing any symptomatic treatment (anti-nausea, appetite stimulants, etc.)

**INVOICE**

37753

**DATE**

5/18/22



**PATIENT**

Rebel Diamante

**SPECIES**

Canine

**BREED**

Mixed

**SEX**

Spayed Female

**AGE**

10 Years

**WEIGHT**

34 Pounds

**INTERPRETED BY**

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

**IMAGING  
PERFORMED BY**

Dr. Elaina Petrone

**HOSPITAL NAME**

Long Branch AH

**REFERRING VET**

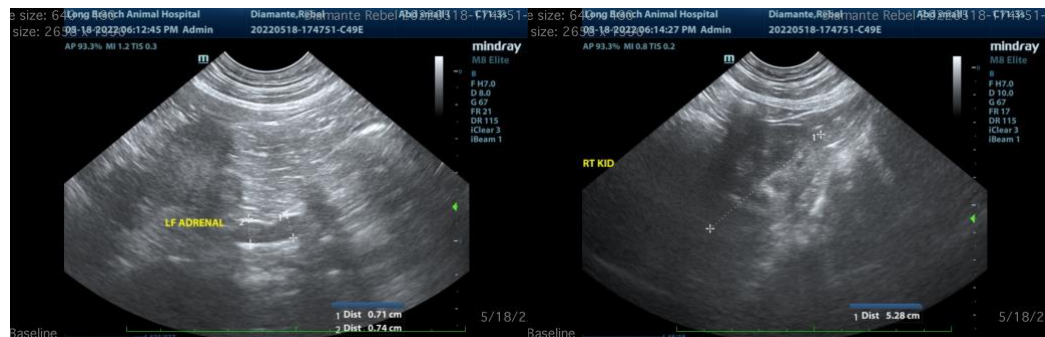
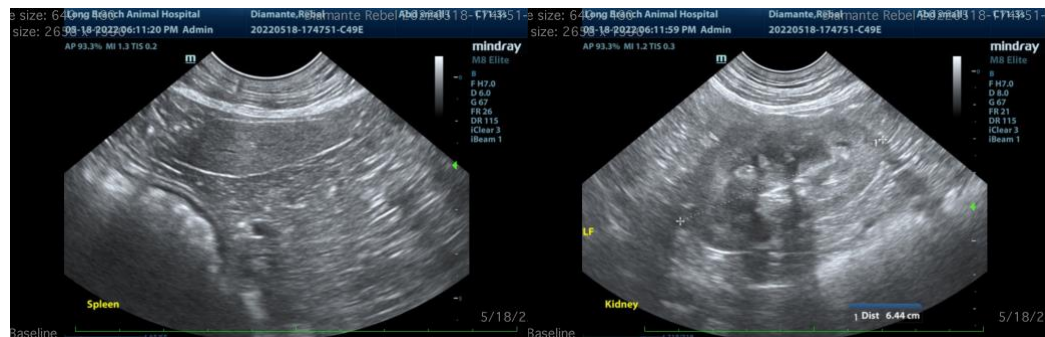
Dr. Elaina Petrone

**INVOICE**

37753

**DATE**

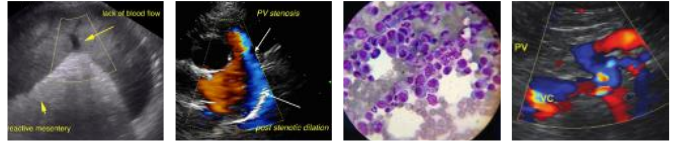
5/18/22



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)



**PATIENT**

kathleen.sennello@sonopath.com

Rebel Diamente

**SPECIES**

Canine

**BREED**

Mixed

**SEX**

Spayed Female

**AGE**

10 Years

**WEIGHT**

34 Pounds

**INTERPRETED BY**

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

**IMAGING  
PERFORMED BY**

Dr. Elaina Petrone

**HOSPITAL NAME**

Long Branch AH

**REFERRING VET**

Dr. Elaina Petrone

**INVOICE**

37753

**DATE**

5/18/22