

**PATIENT PRESENTING CLINICAL SIGNS**

Cashew Herlihy Intermittent vomiting which has increased in frequency. Increased appetite with weight loss. Grade II-III/VI heart murmur. Radiographs reveal cranial organomegaly.

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Canine **Urinary System**

**BREED** The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

**SEX** Normal size and margination was present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 3.5 cm. The right kidney measured 3.9 cm.

**AGE** The area of the aortic trifurcation was free of pathology.

12 Years **Adrenal Glands**

No overt pathology in the area of the left and right adrenal glands.

**WEIGHT** **Spleen**

7.3 Pounds The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted. The spleen measured 0.45 cm in width.

**INTERPRETED BY**

R. McKenzie Daniel, DVM,  
DABVP (Canine and Feline)

**Liver**

**IMAGING PERFORMED BY**

Pamela Harrigan, RDCS

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was subnormal in size with anechoic content and scant luminal debris. The common bile duct was normal.

**HOSPITAL NAME**

Norfolk County VS

**Gastrointestinal**

The stomach exhibited marked distention with retained primarily anechoic fluid and mild non-specific hyperechoic ingesta. Fluid dilation extended into the pyloric outflow without overt evidence of pyloric outflow obstruction.

**REFERRING VET**

Dr Amelia Ragon

The duodenum exhibited mild generalized retained echogenic fluid with evidence of increased peristalsis. An obvious source of distal duodenal or upper jejunal obstruction was not definitively evident. The jejunum and ileum to the level of the ileocolic junction were sonographically unremarkable without concurrent ileus and intact wall layering. The ileocolic junction was sonographically unremarkable. Duodenum wall measured 0.27 cm. Jejunum wall measured 0.22 cm. Ileocolic wall measured 0.33 cm.

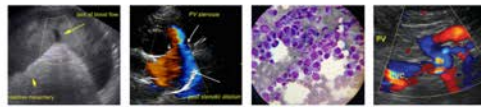
**INVOICE**

25677

Normal visible colon wall layers were present with apparent formed feces in lumen.

**DATE**

9/16/21



**PATIENT** *Pancreas*

Cashew Herlihy The left limb, right limb, and base of the pancreas presented hypoechoic to heterogeneous echogenicity compared to adjacent omental fat. Mild asymmetrical capsule margination was present with mild variable parenchymal swelling and mild peripancreatic inflammation. No overt evidence of neoplasia.

**SPECIES** *Free Abdomen*

Canine No overt lymphadenopathy or peritoneal effusion was present.

**BREED** **ULTRASONOGRAPHIC FINDINGS**

- Marked gastric distention with retained, primarily anechoic fluid and mild non-specific ingesta
- Concurrent mild fluid distended duodenum with subjective increased peristalsis
- Sonographically unremarkable empty jejunum and ileum to the level of the unremarkable ileocolic junction
- Mild active to chronic active pancreatitis
- Bilateral mild chronic renal changes

**AGE** **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

12 Years Considerations for the marked gastric fluid distention with retained non-specific echogenic ingesta as well as duodenal fluid dilation with increased peristalsis may include metabolic upper gastrointestinal ileus potentially owing to inflammatory process or pancreatitis. However, the subjectively increased duodenal peristaltic activity in conjunction with the degree of gastric fluid distention is somewhat concerning for non-visualized distal duodenal or upper jejunal mechanical obstruction in light of the normal non-distended jejunum and ileum. Exploratory laparotomy with gross inspection in the area of the distal duodenum and upper jejunum is warranted given these findings. Intestinal biopsies would be considered essential despite exploratory findings given the patient's weight loss.

**WEIGHT**

7.3 Pounds

**INTERPRETED BY**

R. McKenzie Daniel, DVM,  
 DABVP (Canine and Feline)

**IMAGING PERFORMED BY**

Pamela Harrigan, RDCS

**HOSPITAL NAME**

Norfolk County VS

**REFERRING VET**

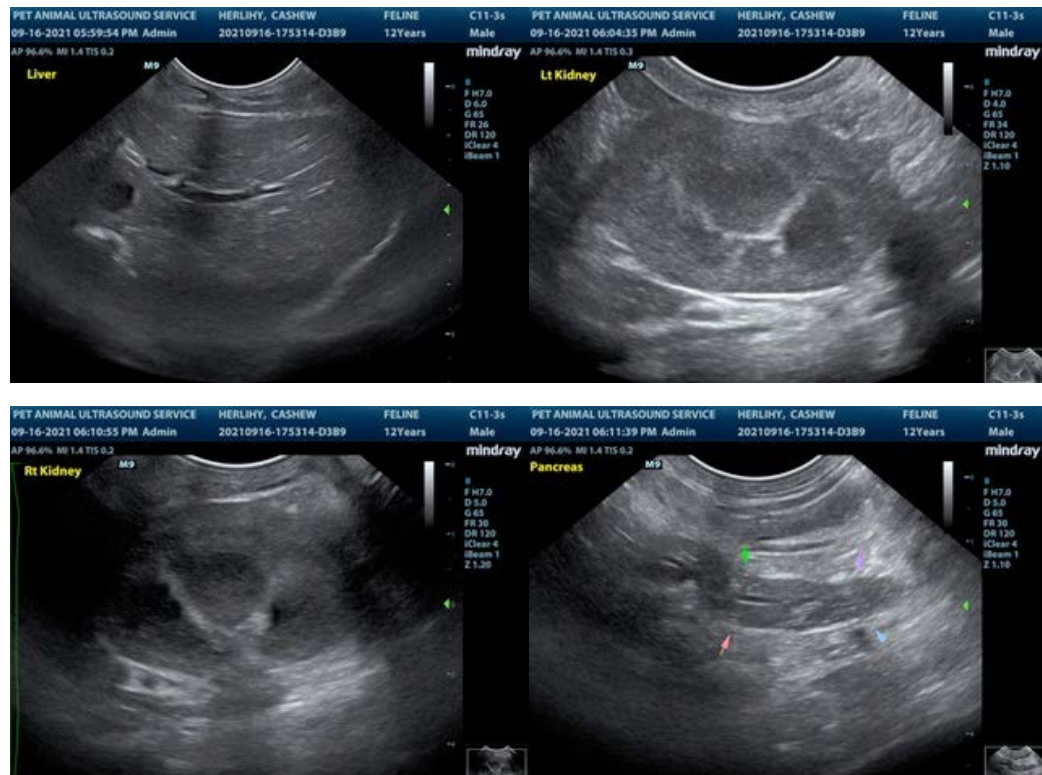
Dr Amelia Ragon

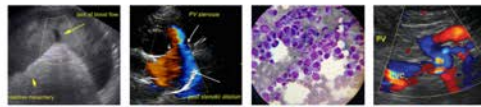
**INVOICE**

25677

**DATE**

9/16/21





**PATIENT**

Cashew Herlihy

**SPECIES**

Canine

**BREED**

DMH

**SEX**

Neutered Male

**AGE**

12 Years

**WEIGHT**

7.3 Pounds

**INTERPRETED BY**

R. McKenzie Daniel, DVM,  
 DABVP (Canine and Feline)

**IMAGING PERFORMED BY**

Pamela Harrigan, RDCS

**HOSPITAL NAME**

Norfolk County VS

**REFERRING VET**

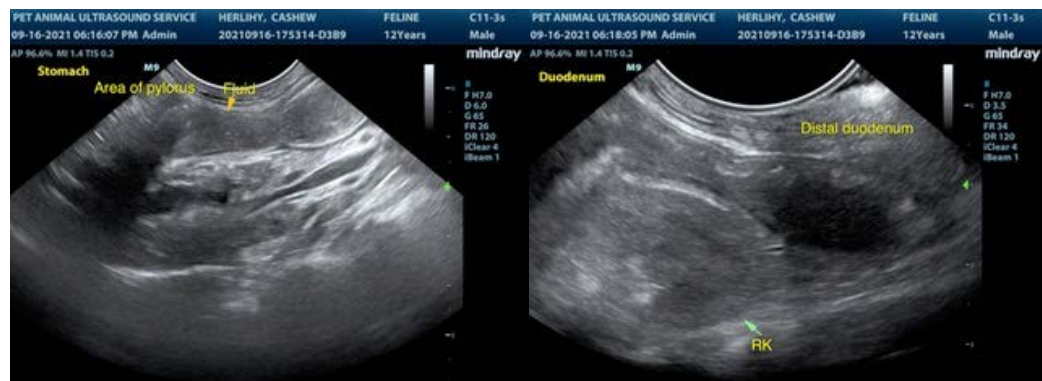
Dr Amelia Ragon

**INVOICE**

25677

**DATE**

9/16/21



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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)  
 info@SonoPath.com