



**PATIENT**

Carmello Muniz

**SPECIES**

Canine

**BREED**

Shih Tzu

**SEX**

Male

**AGE**

8 Years

**WEIGHT**

16 lbs

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Kerri Becker

**HOSPITAL NAME**

North Jersey Animal  
Hospital

**REFERRING VET**

Dr. Chiu

**INVOICE**

72599

**DATE**

12/16/25

**PRESENTING CLINICAL SIGNS**

Suspect cushings- differentiate btwn adrenal vs pituitary. Distended abd (hepatomegaly) PU/PD

Abnormal PE/Chem/CBC/UA Results: HCT-38 Neut-10.28 MONO-1.017 PLT-699 GLU-134 Creat-0.3 ALT-814 ALP-2,462 GGT-305 Chol-584 TT4-0.9 UA WBC-10-15 Bact Rods>40 USG-1.012

**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 prostate is large, heterogeneous, and hyperechoic, measuring 1.74 cm in width.

The left kidney has a normal shape and size (4.11 cm). Overall echogenicity is slightly hyperechoic with poor 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.

The right kidney has a normal shape and size (4.67 cm). Overall echogenicity is slightly hyperechoic with poor 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.

**Adrenal Glands**

The left adrenal gland is normal/borderline “plump”, measuring 0.79 cm at the cranial pole and 0.52 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 borderline “plump”, measuring 1.17 cm at the cranial pole and 0.67 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 (0.97 cm) and the echotexture is homogenous. The splenic capsule is smooth with no visible irregularities. Rare discrete focal hyperechoic, perivascular parenchymal abnormalities are present. The appearance of these lesions is most consistent with benign splenic myelolipomas. The blood flow through the hilus and splenic parenchyma appears normal.

**Liver**

The liver is large in size, and normal in echogenicity with rounded margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.



**PATIENT**

Carmello Muniz

The gall bladder lumen is moderately distended. There is a moderate amount of non-organized echogenic debris. The majority of the debris appears adhered to the gallbladder wall, which appears mildly thickened/irregular. The cystic and common bile ducts are normal/not visible.

**SPECIES**

Canine

***Gastrointestinal***

The stomach contains mild shadowing ingesta. 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 layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

**BREED**

Shih Tzu

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. Duodenum wall measures 0.40 cm. Jejunum wall measures 0.27 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

**SEX**

Male

**AGE**

8 Years

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**

16 lbs

The area of 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.

***Free Abdomen***

**INTERPRETED BY**

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

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.

**ULTRASONOGRAPHIC FINDINGS**

**IMAGING PERFORMED BY**

Kerri Becker

- Large, heterogeneous, hyperechoic prostate – Findings are most consistent with benign prostatic hypertrophy +/- prostatitis. Underlying neoplasia is less likely but cannot be ruled out.
- Borderline “plump” adrenal glands – Findings could be consistent with anatomic variation or early hyperplasia.
- Large, heterogeneous liver – 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.
- Moderate debris visualized within the gallbladder adhered to the gallbladder wall – Findings could be consistent with mild cholecystitis.
- Age related changes visualized associated with both kidneys.

**HOSPITAL NAME**

North Jersey Animal  
Hospital

**REFERRING VET**

Dr. Chiu

**INVOICE**

72599

**DATE**

12/16/25

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The liver is large and heterogeneous. The appearance is likely most consistent with a vacuolar hepatopathy, although other hepatopathies are possible. Additionally, the gallbladder has a moderate



**PATIENT**

Carmello Muniz

**SPECIES**

Canine

**BREED**

Shih Tzu

**SEX**

Male

**AGE**

8 Years

**WEIGHT**

16 lbs

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Kerri Becker

**HOSPITAL NAME**

North Jersey Animal  
 Hospital

**REFERRING VET**

Dr. Chiu

**INVOICE**

72599

**DATE**

12/16/25

amount of adhered debris, which could be consistent with early mild cholecystitis. Consider starting chronic Ursodiol therapy +/- a course of antibiotics and continued monitoring of the gallbladder. If liver values significantly improve, this likely means there is concurrent cholecystitis present. If there is no response to therapy, the changes observed associated with the gallbladder may be less significant

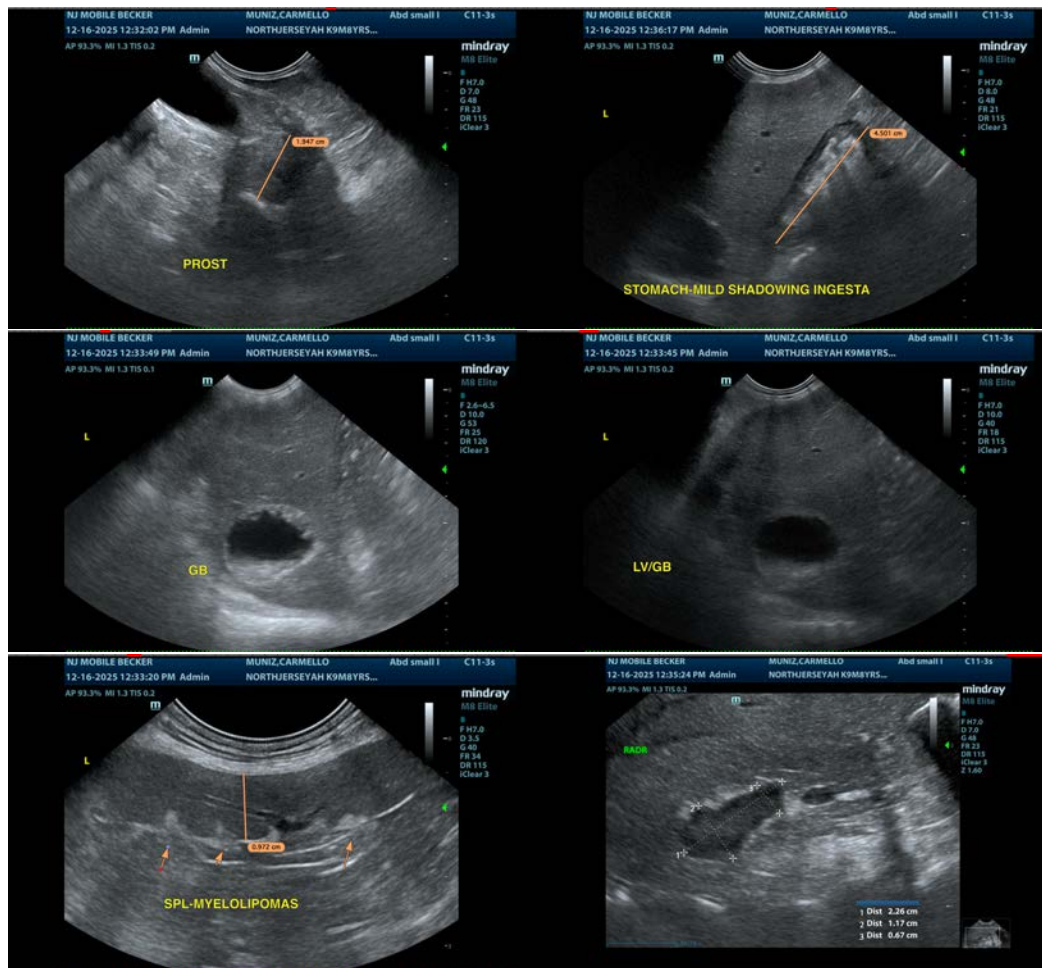
Both adrenals are normal, but hypoechoic and prominent, on the borderline of large. This could be consistent with early PDH or be normal for this individual.

The prostate is large and heterogeneous, most consistent with benign prostatic hypertrophy. Based on the urinalysis submitted, concurrent prostatitis could be present. Recommend a culture on sterile sample. If an infection is present, prostatitis would be suspected. It is possible that neutering would be necessary to permanently resolve the infection.

A urinary tract infection could also be contributing to underlying PU/PD.

If there is no evidence of an infection and no response to treatment for cholecystitis, then consider adrenal function testing, looking for underlying Cushing's disease.

If a more significant hepatopathy is suspected, you could consider a fine needle aspirate of the liver and/or a liver function test.





**PATIENT**

Carmello Muniz

**SPECIES**

Canine

**BREED**

Shih Tzu

**SEX**

Male

**AGE**

8 Years

**WEIGHT**

16 lbs

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Kerri Becker

**HOSPITAL NAME**

North Jersey Animal  
 Hospital

**REFERRING VET**

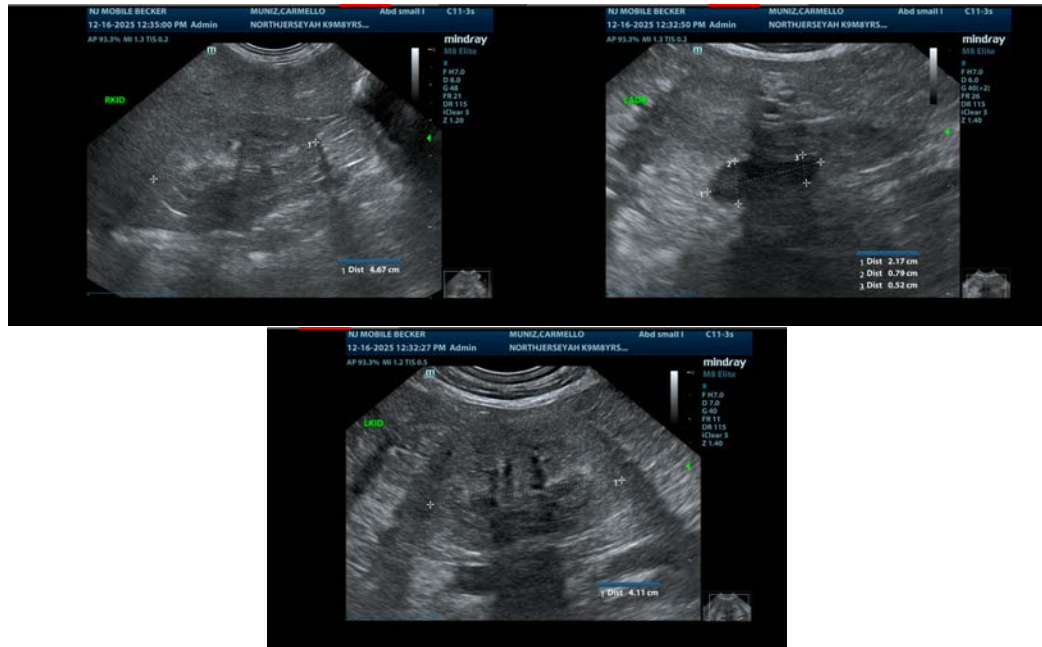
Dr. Chiu

**INVOICE**

72599

**DATE**

12/16/25



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