



**PATIENT PRESENTING CLINICAL SIGNS**

Juno Marquess Hepatomegaly, PU/PD.

**SPECIES** Abnormal PE/Chem/CBC/UA Results: Elevated liver values, cholesterol and renal values elevated baseline cortisol but normal low dose dex response Radiographic Findings hepatomegaly splenomegaly calcification of kidneys.  
Canine

**BREED ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Longhaired Chihuahua **Urinary System**

**SEX** 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.  
Spayed Female

**AGE** The left kidney has a normal shape and size (2.99 cm) with pyelectasia at 0.33 cm and small cortical mineralizations. 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 infarcts or hydroureter. Renal vasculature is normal.  
15 Years

**WEIGHT** The right kidney has a normal shape and size (3.31 cm) with small non-obstructive nephroliths. 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, infarcts or hydroureter. Renal vasculature is normal.  
9.31 Pounds

**INTERPRETED BY**

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

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.56 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.

**IMAGING PERFORMED BY**

Sara Hansen

The right adrenal gland is normal in size measuring 0.49 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**

Santa Clara AH

**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.

**REFERRING VET**

Dr. Brasted-Maki

**Liver**

The liver is large, irregular, and heterogeneous. The visible portions of the vasculature and biliary tract appear normal. In general, the parenchyma is significantly mottled with ill-defined hyper- and hypoechoic regions. There is a focal 0.62 cm cystic structure visualized, and the left ventral portion of the liver extends significantly caudally into the abdomen.

**INVOICE**

44390

**DATE**

1/19/23

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.



**PATIENT** *Gastrointestinal*

Juno Marquess

The stomach is dilated with a large amount of 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.

**SPECIES**

Canine

**BREED**

Longhaired Chihuahua

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 0.34 cm. Jejunum wall measures 0.30 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**

15 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**

9.31 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**

**IMAGING PERFORMED BY**

Sara Hansen

- Large, irregular, heterogeneous/mottled 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. The left ventral portion of the liver extends caudally into the abdomen, creating somewhat of a mass effect.
- Moderate gallbladder debris – The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting but seems unlikely to be causing a current issue. Recommend continued monitoring.
- Large shadowing ingesta within the gastric lumen – Correlate with the feeding history. This could represent normal ingesta if not adequately fasted. Alternately, this could represent ingested foreign material, delayed gastric emptying, etc. Correlate with abdominal radiographs.
- Decreased corticomedullary distinction in both kidneys with left-sided pyelectasia – The bilateral renal findings are consistent with age-related change. Pyelectasia of the kidney(s) could be consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other.

**HOSPITAL NAME**

Santa Clara AH

**REFERRING VET**

Dr. Brasted-Maki

**INVOICE**

44390

**DATE**

1/19/23

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The liver is large and heterogeneous with irregular margins, and the left ventral portion of the liver



**PATIENT**

Juno Marquess

**SPECIES**

Canine

**BREED**

Longhaired Chihuahua

**SEX**

Spayed Female

**AGE**

15 Years

**WEIGHT**

9.31 Pounds

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Sara Hansen

**HOSPITAL NAME**

Santa Clara AH

**REFERRING VET**

Dr. Brasted-Maki

**INVOICE**

44390

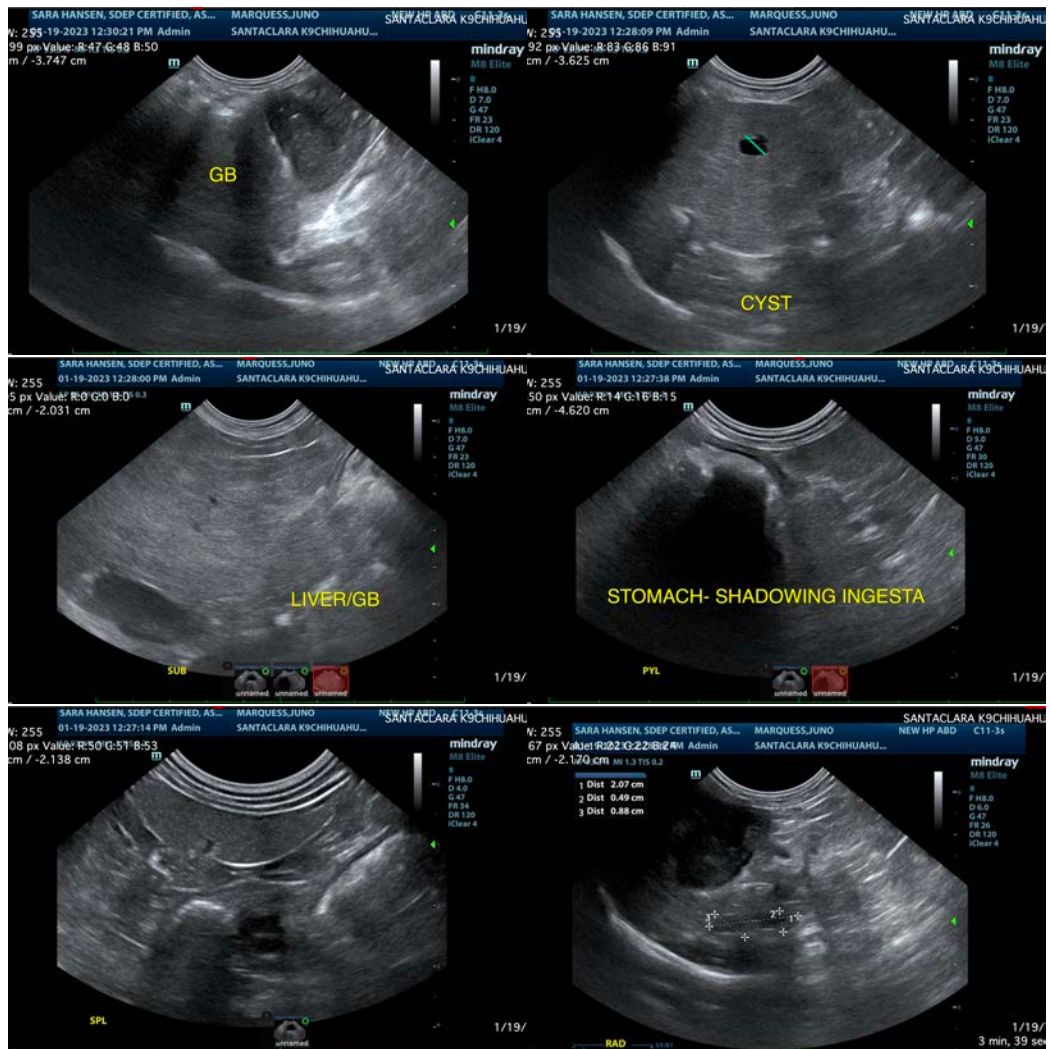
**DATE**

1/19/23

extends caudally into the abdomen, creating somewhat of a mass effect, but it is contiguous with the liver. Consider a fine needle aspirate in this region, and a liver function test.

The remaining abnormalities described do not appear all that significant. The changes observed in the kidneys are consistent with chronic progressive renal disease. Recommend a blood pressure evaluation, urinalysis and culture, and continued monitoring particularly of the dilation visualized in the left kidney.

The adrenals appear relatively normal on today's exam. This does not rule out the possibility of Cushing's disease but may make it somewhat less likely. Findings could be consistent with a primary vacuolar hepatopathy (specific lab values not included).





**PATIENT**

Juno Marquess

**SPECIES**

Canine

**BREED**

Longhaired Chihuahua

**SEX**

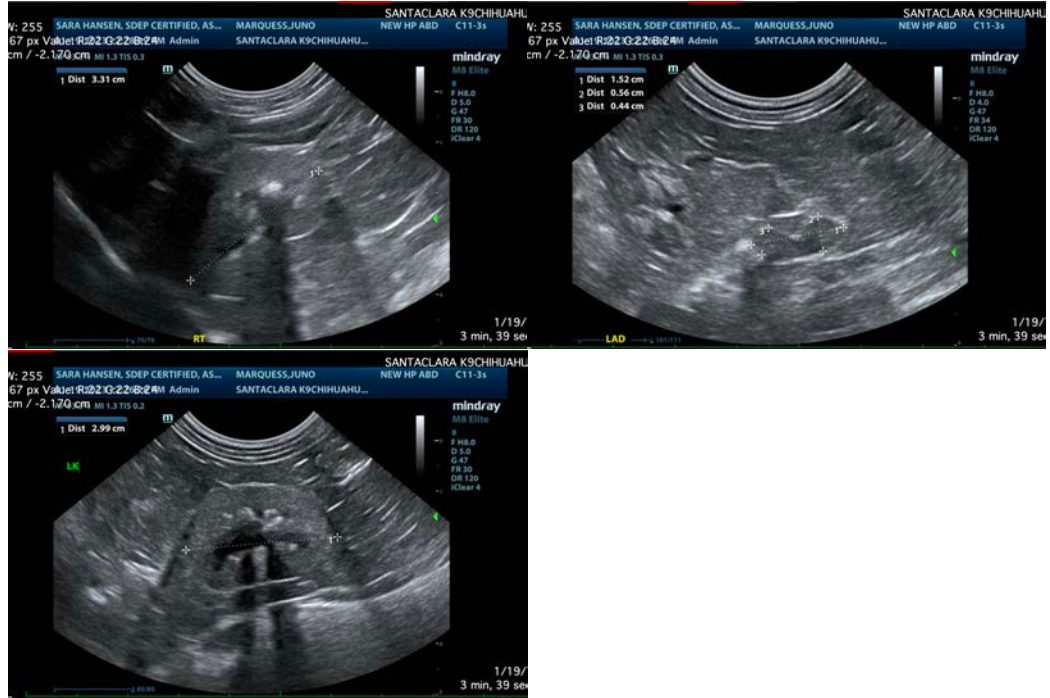
Spayed Female

**AGE**

15 Years

**WEIGHT**

9.31 Pounds



**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Sara Hansen

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)

kathleen.sennello@sonopath.com

**HOSPITAL NAME**

Santa Clara AH

**REFERRING VET**

Dr. Brasted-Maki

**INVOICE**

44390

**DATE**

1/19/23