



**PATIENT**

Chato Ambriz

**SPECIES**

Canine

**BREED**

Chihuahua Mix

**SEX**

MN

**AGE**

9

**WEIGHT**

7.8

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Kalenius

**HOSPITAL NAME**

Wilvet Salem

**REFERRING VET**

Dr. Kalenius

**INVOICE**

12925ag

**DATE**

02/07/2023

**PRESENTING CLINICAL SIGNS**

Past history of two weeks of lethargy and being inappetant. Had acute onset of blindness on 1/22. Seen at VCA Salem on 2/6 in the evening. Febrile there 105.0F. Had panleukopenia- WBC's 1.12, lymphopenia 0.27, neutropenia 0.71, albumen decreased 2.1 g/dL, ALP 407 U/L, hypernatremia 167 and thrombocytopenia Transferred with patent IVC in RCV. Chest and abdominal rads did not have effusion present and no petechiae.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with dependent to non-dependent particulate sediment. The sediment may indicate cellular debris / protein, crystalline debris, lipid, or mucus. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio and normal corticomedullary definition were maintained. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pelvic dilation. The left kidney measured 4.9 cm in length. The right kidney measured 4.7 cm in length.

The area of the aortic trifurcation was free of pathology.

The area of the residual prostate appeared normal and free of pathology.

**Adrenal Glands**

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.55 cm width at the caudal pole and 0.65 cm width at the cranial pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.50 cm width at the caudal pole and 0.53 cm width at the cranial pole.

**Spleen**

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.

**Liver/Gallbladder**

The liver presented mild to moderately enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with primarily anechoic luminal content. The cystic and common bile ducts were normal.

**Gastrointestinal**



<b>PATIENT</b>	The stomach presented intact mildly prominent wall layering with a normal wall layer ratio. The lumen of the stomach contained very minor retained fluid along with suspect mild congealed ingesta/chyme in the area of the pylorus with no signs of ileus, obstruction or foreign material.
Chato Ambriz	
<b>SPECIES</b>	The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. Subtle intermittent duodenojejunal mucosal speckling was present. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material.
Canine	
<b>BREED</b>	The colon walls presented intact yet prominent wall layering with mild thickened to echogenic submucosa. Semi formed to soft fecal matter was present in the colon lumen with lumen dilation.
Chihuahua Mix	
	<b>Pancreas</b>
	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 reactivity / inflammation. No overt evidence of neoplasia.
<b>SEX</b>	
MN	
	<b>Free Abdomen</b>
<b>AGE</b>	Intermittent small pocket of very scant peritoneal effusion was present with mild generalized increased omental echogenicity.
9	
	Intermittent mildly prominent to enlarged medial iliac lymph nodes were present. The lymph nodes were essentially isoechoic to adjacent omentum without evidence of peripheral inflammation and maintaining a normal width: length ratio (<0.5).
<b>WEIGHT</b>	
7.8	
	<b>ULTRASONOGRAPHIC FINDINGS</b>
<b>INTERPRETED BY</b>	<ul style="list-style-type: none"> <li>• Mild dependent to non-dependent particulate urinary bladder sediment, possibly mild pyuria</li> <li>• Normal bilateral kidneys</li> <li>• Hepatopathy-non-specific although suggestive of benign metabolic/reactive or vacuolar hepatopathy</li> <li>• Normal gallbladder</li> <li>• Gastroenterocolitis pattern with mild congealed non-obstructive pyloric ingesta/chyme</li> <li>• Suspect low-grade pancreatitis</li> </ul>
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	
<b>IMAGING PERFORMED BY</b>	<b>INTERPRETATION OF THE FINDINGS &amp; FURTHER RECOMMENDATIONS</b>
Dr. Kalenius	Full UA +/- C/S if evidence of inflammatory cells is recommended. Potential for pancreatitis may be considered if there is evidence of cranial abdominal or subxiphoid discomfort on palpation. Correlation with a spec cPL or a GI panel to include PLI/TLI/Cobalamin/Folate is recommended. Assuming normal clotting status, a hepatic FNA for screening cytology could be considered to ensure only benign changes are present. No overt evidence of adrenal or renal pathology as a cause of hypertension as a contributing factor to the patient's acute onset blindness. A CBC path review and infectious disease serology could be considered if clinically indicated.
<b>HOSPITAL NAME</b>	
Wilvet Salem	
<b>REFERRING VET</b>	For an additional charge, internal medicine consult can be utilized through SonoPath.com. You can select the internal medicine drop down at <a href="http://spa.sonopath.com/">http://spa.sonopath.com/</a> .
Dr. Kalenius	
<b>INVOICE</b>	One of the world's top internists & SonoPath associate Dr. Remo Lobetti BVSc, MMedVet, PhD, DECVIM can evaluate your case through SonoPath. <a href="https://sonopath.com/resources/sonopath-services/internal-medicine-teleconsultation-services">https://sonopath.com/resources/sonopath-services/internal-medicine-teleconsultation-services</a>
12925ag	
<b>DATE</b>	
02/07/2023	



**PATIENT**

Chato Ambriz

**SPECIES**

Canine

**BREED**

Chihuahua Mix

**SEX**

MN

**AGE**

9

**WEIGHT**

7.8

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Kalenius

**HOSPITAL NAME**

Wilvet Salem

**REFERRING VET**

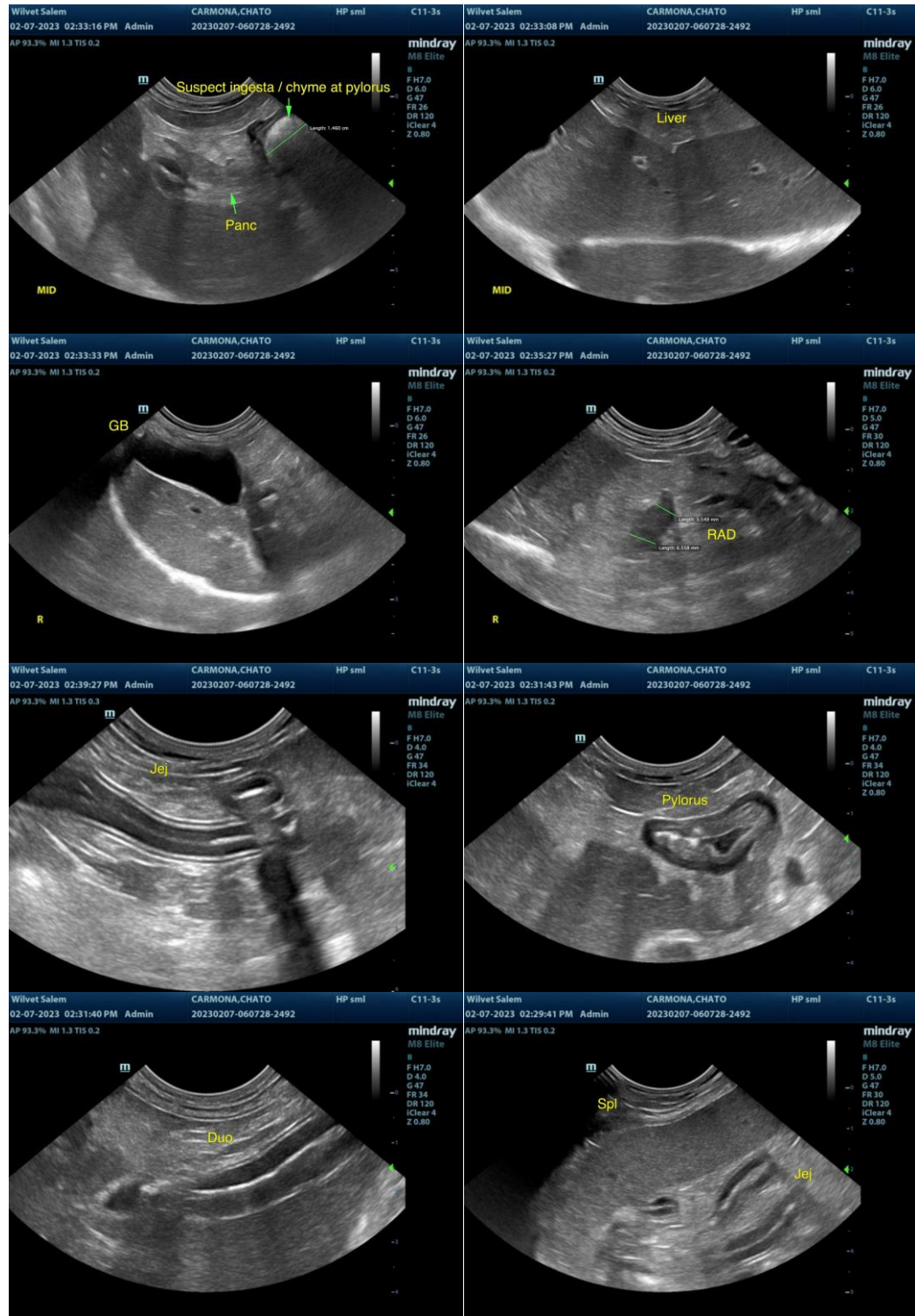
Dr. Kalenius

**INVOICE**

12925ag

**DATE**

02/07/2023





**PATIENT**

Chato Ambriz

**SPECIES**

Canine

**BREED**

Chihuahua Mix

**SEX**

MN

**AGE**

9

**WEIGHT**

7.8

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Kalenius

**HOSPITAL NAME**

Wilvet Salem

**REFERRING VET**

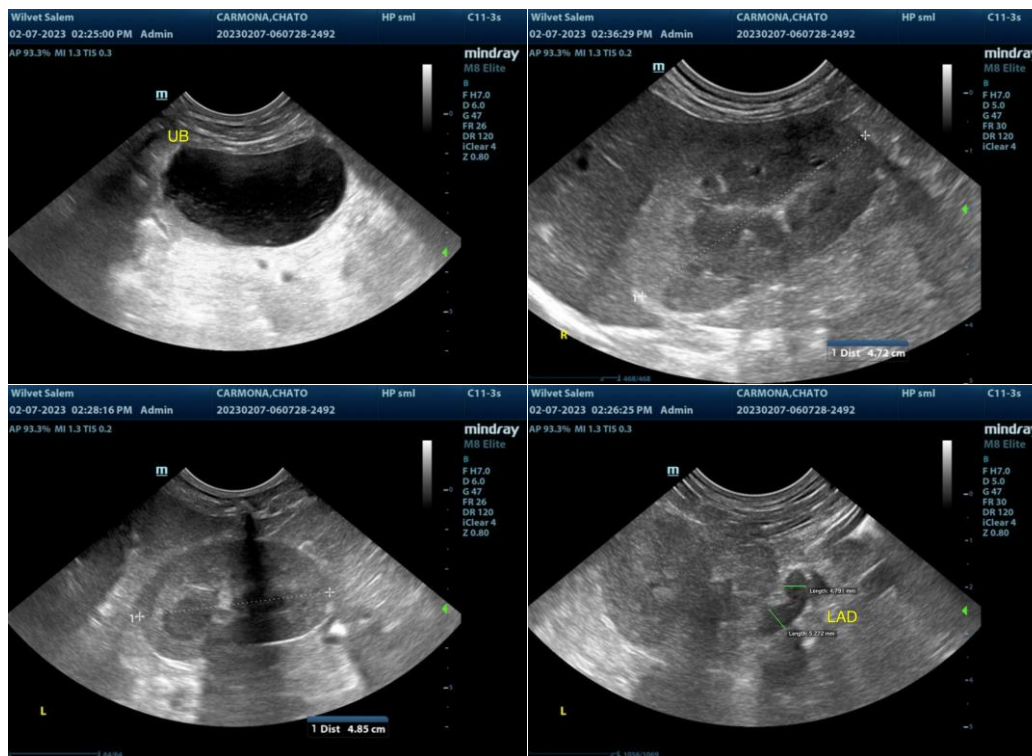
Dr. Kalenius

**INVOICE**

12925ag

**DATE**

02/07/2023



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.

R. McKenzie Daniel, DVM, DABVP (Canine/Feline Practice)  
[mac.daniel@sonopath.com](mailto:mac.daniel@sonopath.com)