



**PATIENT**

Mittens Mexico

**SPECIES**

Canine

**BREED**

Chihuahua

**SEX**

Intact Female

**AGE**

13 Years

**WEIGHT**

10.8

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Waffle

**HOSPITAL NAME**

Torch Lake VC

**REFERRING VET**

Dr. Waffle

**INVOICE**

25177

**DATE**

9/3/21

**PRESENTING CLINICAL SIGNS**

Owner noticed mammary glands have severely enlarged in the last week. Today she stopped eating, has been polydipsic, and is no longer able to walk on her hind limbs. Is not spayed - owner does not believe she has had a heat cycle in many years

Abnormal PE/Chem/CBC/UA Results: Severely enlarged mammary chain -firm, ulcerated lesions noted Pendulous abdomen (Hx of cushings) CBC - 35.5; WBC - 43.9; NEu - 31.76; LYM - 5.98; Mono - 3.12; EOS - 2.94; PLT - 30 (not confirmed by blood smear yet) Creatinine - off chart; BUN - 95; PHOS - 14.2 - remainder of chem pending

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 cm exhibited normal thickness and tone. Primarily anechoic urine was present in the lumen. Primarily dependent, particulate to echogenic sediment was present without evidence of calculus formation. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic mural changes were noted.

Normal size and margination were 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. Small cortical cysts noted. The left kidney measured 4.2 cm. The right kidney measured 4.0 cm.

**Adrenal Glands**

The left adrenal gland exhibited non-homogeneous cranial enlargement with mild symmetrical capsule distortion. No overt evidence of parenchymal mineralization. The cranial left adrenal gland measured 1.5 cm x 1.5 cm. The caudal pole of the left adrenal gland measured 0.66 cm in width. The right adrenal gland was not definitively visualized.

**Spleen**

The spleen exhibited primarily finely textured parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Mild generalized parenchyma heterogeneity was present without evidence of nodular changes. 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. The parenchymal heterogeneity is likely consistent with benign changes such as extramedullary hematopoiesis or age related remodeling with minor potential for inflammatory or neoplastic disease.

**Liver**

The liver presented 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 echogenic, nonmineralized, non dependent biliary sludge. The biliary sludge was non organized with a hypoechoic to anechoic, irregular to interrupted rim visible between the nondependent sludge and inner wall. No signs of peripheral inflammation.

**Gastrointestinal**

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material.



<b>PATIENT</b>	The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material.
Mittens Mexico	Normal visible colon wall layers were present with apparent formed feces in lumen.
<b>SPECIES</b>	<b><i>Pancreas</i></b>
Canine	The parenchyma of the left limb, body and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease was evident.
<b>BREED</b>	<b><i>Free Abdomen</i></b>
Chihuahua	The visualized uterus noted between the urinary bladder and colon exhibited mild prominent size with potential subtle luminal fluid accumulation and suggestive mildly prominent walls with asymmetrical luminal surface. The uterine body measured 1.2 cm diameter.
<b>SEX</b>	
Intact Female	The probable left ovary exhibited mild generalized enlargement with generalized cystic changes containing anechoic fluid. The left ovary measured 1.6 cm diameter. The right ovary was also mildly prominent and cystic in appearance, yet not as dramatic as the left, measuring 1.4 cm diameter.
<b>AGE</b>	
13 Years	No overt lymphadenopathy or peritoneal effusion was present.
<b>WEIGHT</b>	
10.8	<ul style="list-style-type: none"> <li>Mild to moderate urinary bladder sediment, possible pyuria</li> <li>Mildly prominent visible uterine body – endometritis, hyperplasia, mild pyometra, or potential false pregnancy possible.</li> </ul>
<b>INTERPRETED BY</b>	<ul style="list-style-type: none"> <li>Bilateral cystic ovaries, no overt ovarian masses</li> <li>Bilateral chronic renal changes with cortical cysts</li> <li>Cranial left adrenomegaly - nodule (adenoma) or neoplasia (adenocarcinoma, pheochromocytoma or other) possible.</li> <li>Hepatomegaly – subjectively benign</li> <li>Moderate non-dependent to emerging organized gallbladder debris, possible partial gallbladder mucocele.</li> </ul>
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	
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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Subjectively, the bilateral kidneys do not appear to be end stage. Correlation with urinalysis recommended to assess for prerenal versus renal azotemia. Hospitalization with diuresis protocol with monitoring of urine output, body weight, and reassessment of renal parameters recommended. Thorough neurological and musculoskeletal examination is recommended if not done. Assessment for evidence of cranial abdominal or subxiphoid discomfort in pain in the area of the gallbladder is suggested. Correlation with pending labs and hepatic enzyme assessment recommended.



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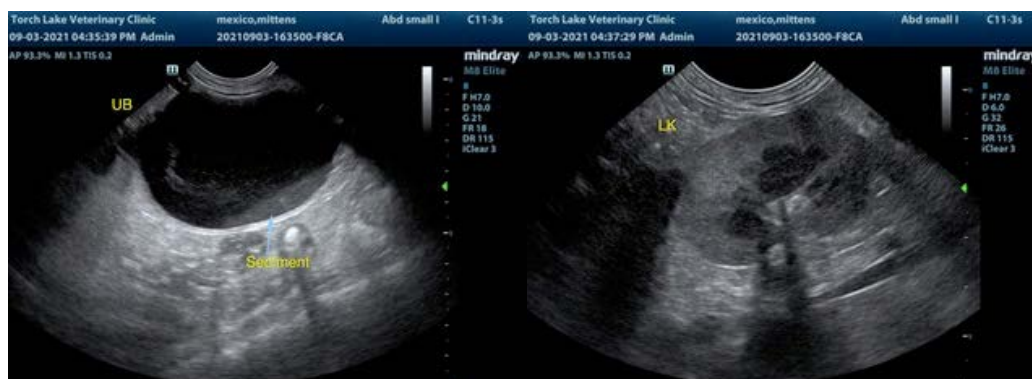
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

**AGE**

13 Years

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.

**WEIGHT**

10.8

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