



**PATIENT**

Chiquita Fernandez

**SPECIES**

Canine

**BREED**

Chihuahua Mix

**SEX**

Female Spayed

**AGE**

14 years

**WEIGHT**

12 lbs.

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Taylor Parker

**HOSPITAL NAME**

Lone Mountain AH

**REFERRING VET**

Dr. Taylor Parker

**INVOICE**

13557

**DATE**

3/25/22

**PRESENTING CLINICAL SIGNS**

Presented for routine bloodwork which showed elevated liver enzymes. X-ray showed severe hepatomegaly. Elevated

Abnormal PE/Chem/CBC/UA Results: AlkPhos 1027 PSL 264

**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. 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 was noted.

The area of the aortic trifurcation was free of pathology.

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 mild to moderate loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 4.2 cm in length. The right kidney measured 4.6 cm in length.

**Adrenal Glands**

The bilateral adrenal glands were normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The left adrenal gland measured 0.67 cm width in the caudal pole. The right adrenal gland measured 0.64 cm width in the caudal 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**

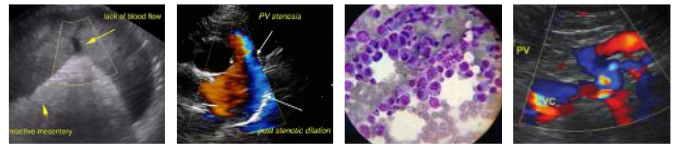
The liver was moderate to potentially markedly enlarged with symmetrical yet swollen hepatic contour. Generalized mild mixed echogenic hepatic parenchyma exhibiting moderate coarse echotexture, parenchymal remodeling, and intermittent discrete nondisruptive hypoechoic intra-parenchymal nodules were present. An example of a nodule measured 0.74 cm in diameter. The gallbladder contained mild gallbladder debris. The gallbladder was otherwise normal. The common bile duct was normal.

**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 and maintained a 1:3 muscularis/mucosa ratio with intermittent mild duodenojejunal mucosal speckling.
Chiquita Fernandez	
<b>SPECIES</b>	Normal visible colon wall layers were present with apparent formed feces in lumen.
Canine	<b>Pancreas</b>
<b>BREED</b>	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 were evident.
Chihuahua Mix	<b>Free Abdomen</b>
<b>SEX</b>	No overt lymphadenopathy or peritoneal effusion was present.
Female Spayed	<b>ULTRASONOGRAPHIC FINDINGS</b>
<b>AGE</b>	<b>Primary Findings</b>
14 years	<ul style="list-style-type: none"> <li>• Hepatomegaly exhibiting remodeled to discretely nodular parenchyma</li> <li>• Mild gallbladder debris (non-mucocele)</li> <li>• Intermittent nonspecific small intestinal mucosal speckling</li> <li>• Sonographically unremarkable pancreas</li> <li>• Mild to moderate chronic renal changes</li> </ul>
<b>WEIGHT</b>	
12 lbs.	<b>INTERPRETATION OF THE FINDINGS &amp; FURTHER RECOMMENDATIONS</b>
<b>INTERPRETED BY</b>	Although nonspecific, the hepatic presentation may suggest vacuolar hepatopathy with benign parenchymal remodeling, areas of discrete hematopoiesis, or nodular to regenerative hyperplasia. Inflammatory hepatic parenchymal processes such as cholangiohepatitis given the presence of mild gallbladder debris, cholestasis, or other hepatopathy possible. Hepatic neoplasia is considered a less likely differential diagnosis.
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	Assuming normal clotting status, ultrasound-guided FNA of the liver is warranted for screening cytology primarily to assess for evidence of inflammatory cells. Hepatosupportive medications including Denamarin and Ursodiol may prove beneficial.
<b>IMAGING PERFORMED BY</b>	
Dr. Taylor Parker	
<b>HOSPITAL NAME</b>	
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Dr. Taylor Parker	Adrenal screening with UCCR +/- LDDST may be considered if clinical signs suggestive of adrenal hyperfunction are present. The Intermittent small intestinal mucosal speckling is nonspecific and likely incidental, although this finding has been associated with enteritis if clinically applicable.
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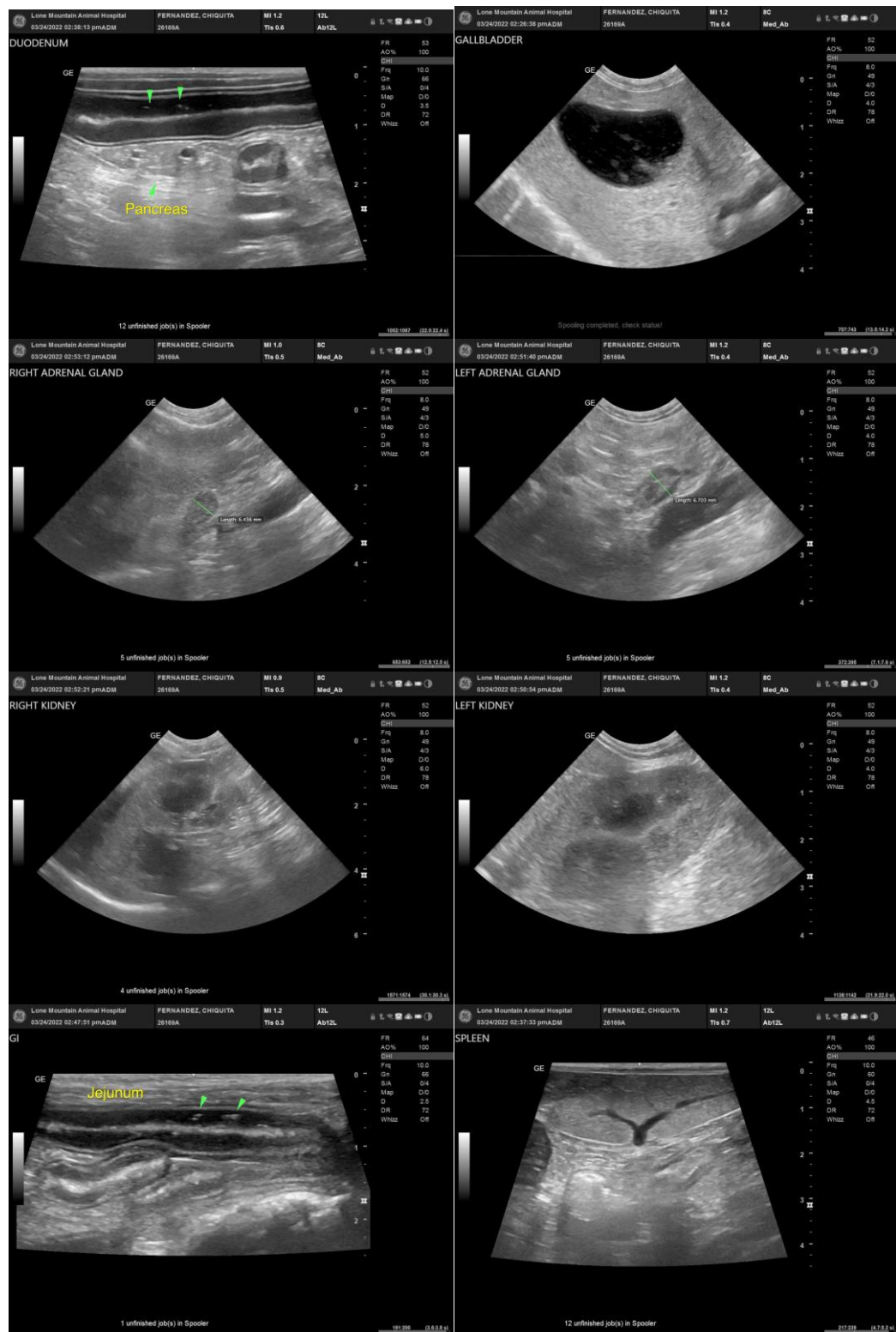
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**The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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)**  
info@SonoPath.com