



**PATIENT PRESENTING CLINICAL SIGNS**

Daisy Richardson History: ELEVATED RENAL VALUES, WEIGHT LOSS

**SPECIES** Labs: CBC Hematocrit 1.8, WBC 17.5 normal differential, Chemistry panel BUN 93, Creat 4.2, SDMA 36, Calcium 12.2, ALT 144, T4 1.2

Feline **ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED** *Urinary System*

Domestic Shorthair 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 were noted. Aortic trifurcation was normal.

**SEX**

Spayed Female Normal size and mild asymmetrical renal 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 moderate loss of corticomedullary border demarcation and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 3.1 cm in length. The right kidney measured 3.5 cm in length.

**AGE**

2003

*Adrenal Glands*

**WEIGHT**

6 Pounds

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.44 cm width. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.35 cm width.

**INTERPRETED BY**

*Spleen*

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

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 no overt evidence of neoplastic criteria. The spleen was otherwise normal in size, measuring 0.65 cm in width.

**IMAGING PERFORMED BY**

Rebekah Jakum, CVT  
 ARDMS/RVT

**HOSPITAL NAME**

*Liver*

Maple Hills VH

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild to benign parenchymal remodeling. Multiple, non-expansive, discreet hypoechoic intraparenchymal nodules were present. The hepatic and portal vasculature were normal in appearance without signs of congestion.

**REFERRING VET**

Dr. Banzhof

The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The common bile duct was dilated and tortuous without overt post hepatic obstruction. The common bile duct measured 0.28 cm in width.

**INVOICE**

14122

*Gastrointestinal*

**DATE**

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.

2/28/22



<b>PATIENT</b>	The intestinal walls demonstrated intact wall layers with diffusely thickened walls and altered 1:3 muscularis / mucosa ratio primarily consisting of mild muscularis hypertrophy. No overt evidence of loss of intestinal wall layering or intestinal masses.
Daisy Richardson	
<b>SPECIES</b>	Normal visible colon wall layers were present with apparent formed feces in lumen.
Feline	<b>Pancreas</b>
<b>BREED</b>	The left limb of the pancreas exhibited subtle prominent size with subtle hypoechoic to nonhomogeneous parenchyma.
Domestic Shorthair	<b>Free Abdomen</b>
<b>SEX</b>	Intermittent, mildly prominent to enlarged mid abdominal jejunal 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). An example of lymph node size measured 0.4 cm in diameter.
Spayed Female	
<b>AGE</b>	Very scant pocket of free fluid was noted between the upper duodenum and caudal liver. No other evidence of free fluid noted.
2003	<b>ULTRASONOGRAPHIC FINDINGS</b>
<b>WEIGHT</b>	<ul style="list-style-type: none"> <li>• Moderate chronic renal changes</li> <li>• IBD intestinal pattern</li> <li>• Associated, mild, subjectively benign/reactive jejunal lymph nodes</li> <li>• Suspect mild chronic active pancreatitis</li> <li>• Low-grade hepatopathy with subtle nodular parenchyma- suspect low-grade inflammatory hepatopathy with subtle areas of hematopoiesis or nodular/regenerative hyperplasia. Neoplasia is considered a less likely differential diagnosis.</li> <li>• Mild nonobstructive proximal common bile duct dilation. This finding may suggest age related changes or secondary to underlying cholangitis / cholangiohepatitis especially if previous or current liver enzymes elevations have been noted. No overt signs of post hepatic obstruction.</li> </ul>
6 Pounds	
<b>INTERPRETED BY</b>	
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	
<b>IMAGING PERFORMED BY</b>	
Rebekah Jakum, CVT ARDMS/RVT	
<b>HOSPITAL NAME</b>	
Maple Hills VH	
<b>REFERRING VET</b>	<b>INTERPRETATION OF THE FINDINGS &amp; FURTHER RECOMMENDATIONS</b>
Dr. Banzhof	The small intestine exhibited mural changes, suggestive of inflammatory enteropathy, such as IBD/eosinophilic enteritis. Potential for low-grade neoplastic enteropathy, such as lymphoma, which may present in similar sonographic manner cannot be definitively excluded. Triad disease is a consideration in this patient. Further assessment may include GI panel, to include PLI, TLI, cobalamin and folate. Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered.
<b>INVOICE</b>	
14122	
<b>DATE</b>	Empirically, CKD therapy with empirical IBD/triad disease protocol may prove beneficial.
2/28/22	



**PATIENT**

Daisy Richardson

**SPECIES**

Feline

**BREED**

Domestic Shorthair

**SEX**

Spayed Female

**AGE**

2003

**WEIGHT**

6 Pounds

**INTERPRETED BY**

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DVM, DABVP  
(Canine and Feline)

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**HOSPITAL NAME**

Maple Hills VH

**REFERRING VET**

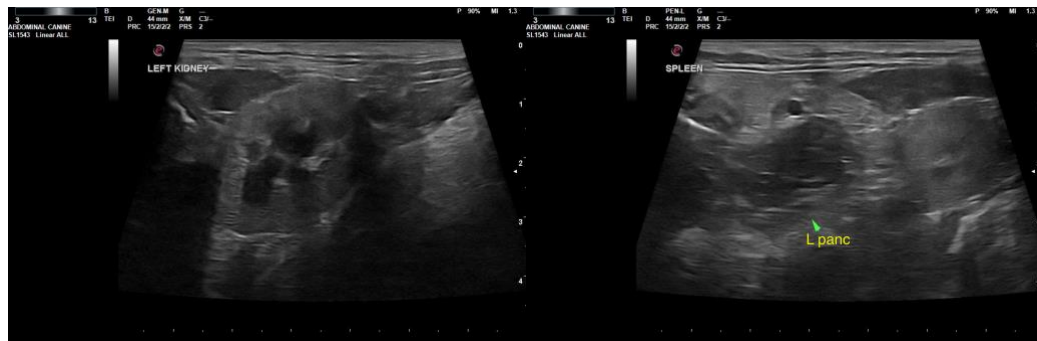
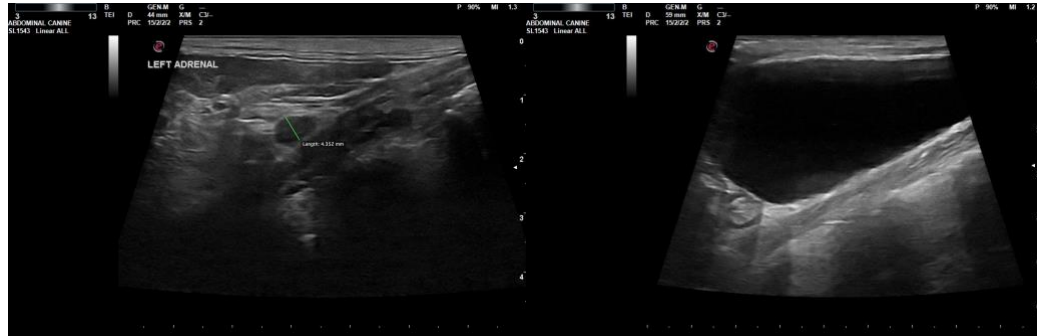
Dr. Banzhof

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**DATE**

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**PATIENT**

Daisy Richardson

**SPECIES**

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Domestic Shorthair

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Spayed Female

**AGE**

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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.

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.

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