



**PATIENT PRESENTING CLINICAL SIGNS**

Molly Hinkle History: Lethargy, azotemia, PLN  
Medication: Analpril, Amlodipine, Cerenia

**SPECIES** BUN 104, Crea 2.4, Phos 11.8, Alb 2.3, Chol 220, Amylase 2062, Potassium 7.0.

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED** *Urinary System*

Lab The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 4.0 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.

**SEX**

FS The area of the aortic trifurcation was free of pathology.

**AGE**

12 years 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. A hyperechoic corticomedullary band, consistent with a medullary rim sign, was present. This is a nonspecific finding seen in both normal and abnormal kidneys. It may be associated interstitial renal disease, hypercalcemia, tubular necrosis, lymphoma, and Leptospirosis.

**WEIGHT**

52.5Pounds However, it is likely an idiopathic finding. The left kidney measured 6.5 cm. The right kidney measured 7.0 cm.

**Adrenal Glands**

**INTERPRETED BY** The adrenal glands were uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 3.1 cm length x 0.69 cm at the caudal pole. The left adrenal gland measured 2.9 cm length x 0.80 cm at the caudal pole.

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

**Spleen**

**IMAGING PERFORMED BY** 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.

Rebekah Jakum, CVT  
ARDMS/RVT

**HOSPITAL NAME**

Alburtis AH

**Liver**

**REFERRING VET**

Dr. Wegner

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. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non distended in size with mild, echogenic, nonmineralized biliary sludge. The cystic duct and common bile ducts were normal without evidence of dilation.

**INVOICE**

24763

**Gastrointestinal**

**DATE**

8.17.2021

The stomach presented moderate wall thickening secondary to echogenic mucosa hypertrophy. Intact wall layering was maintained and distinct. A minor amount of retained anechoic fluid was present in the gastric lumen. Gastric body wall measured up to 1.3 cm including the prominent to thickened gastric



**PATIENT** Molly Hinkle  
mucosa. Pylorus wall measured 0.68 cm. No overt evidence of foreign material with mild luminal gas present .

**SPECIES** Canine  
The upper duodenum presented intact yet prominent wall layering, measuring 0.78 cm in width. The jejunum and ileum were sonographically unremarkable.

Normal visible colon wall layers were present with apparent formed feces in lumen.

**BREED** Lab  
**Pancreas**  
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.

**SEX** FS  
**Free Abdomen**  
No overt lymphadenopathy or peritoneal effusion was present.

**AGE** 12 years  
**ULTRASONOGRAPHIC FINDINGS**

- Bilateral chronic nephropathy with non-specific medullary rim sign
- Gastritis/upper duodenitis with mild gastric stasis, potential for uremic gastroduodenitis

**WEIGHT** 52.5Pounds  
**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**  
A minor potential for infiltrative gastric and upper duodenal neoplasia exists, yet considered less likely. In addition to anti-nausea medications, gastroprotectants would be appropriate. Continued PLN therapy with consideration for angiotensin receptor blocker is recommended if persistently elevated UPC despite ACE inhibitor medication. Plavix and reduced protein diet may also be considered.

**INTERPRETED BY** R. McKenzie Daniel, DVM, DABVP (Canine and Feline)  
For an additional charge, internal medicine consult can be utilized through Sonopath.com. You can select the internal medicine drop down at <http://spa.sonopath.com/>.

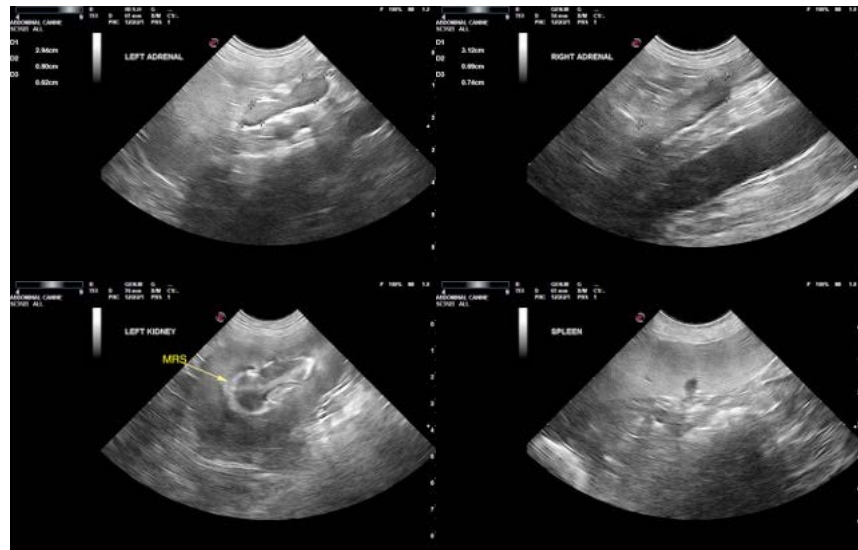
**IMAGING PERFORMED BY** Rebekah Jakum, CVT ARDMS/RVT  
One of the world's top internists & SonoPath associate Dr. Remo Lobetti BVSc, MMedVet, PhD, DECVIM can evaluate your case through SonoPath. <https://sonopath.com/resources/sonopath-services/internal-medicine-teleconsultation-services>

**HOSPITAL NAME** Alburtis AH

**REFERRING VET** Dr. Wegner

**INVOICE** 24763

**DATE** 8.17.2021





**PATIENT**

Molly Hinkle

**SPECIES**

Canine

**BREED**

Lab

**SEX**

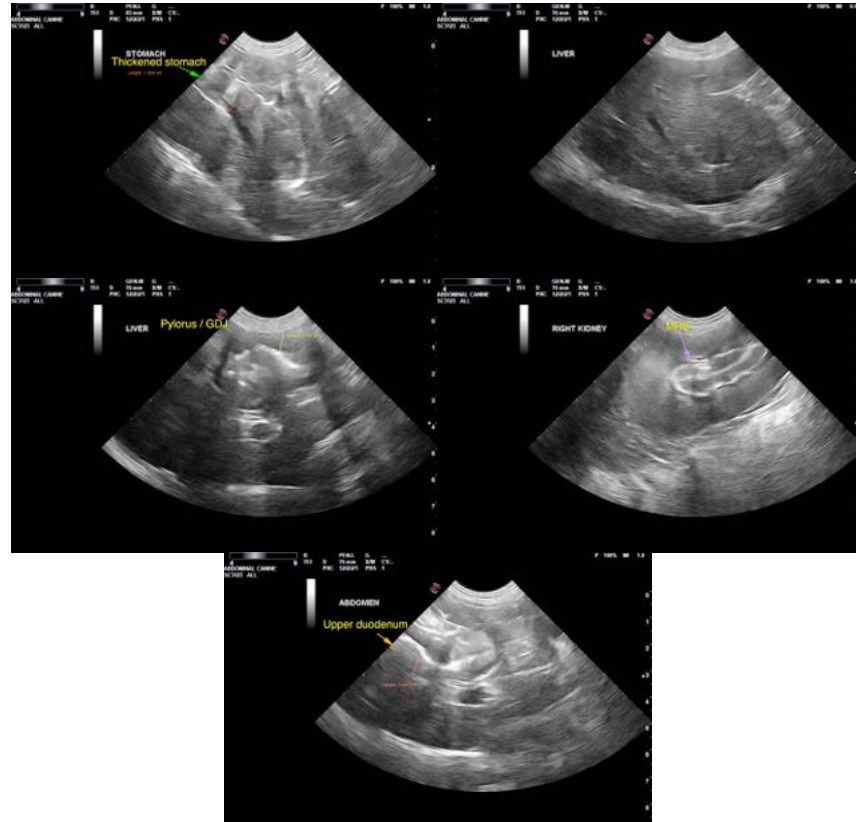
FS

**AGE**

12 years

**WEIGHT**

52.5Pounds



**INTERPRETED BY**

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

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.

**IMAGING PERFORMED BY**

Rebekah Jakum, CVT  
ARDMS/RVT

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)**

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Dr. Wegner

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