



**PATIENT PRESENTING CLINICAL SIGNS**

Maddie Ingersoll Proteinuria, loose stool for several days, now vomiting Benazepril 5, Gabapentin  
 ALP 1003, ALT 140, BUN 48, Creatinine 2.0

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED**

Australian Cattle Dog  
 Mix

**Urinary System**

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 was noted.

**SEX**

FS

The area of the aortic trifurcation was free of pathology.

**AGE**

2009

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 loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 5.6 cm in length. The right kidney measured 5.9 cm in length.

**WEIGHT**

45

**Adrenal Glands**

The bilateral adrenal glands were mildly prominent in size exhibiting a maintained symmetrical capsule contour and uniform parenchyma. No evidence of parenchymal mineralization was noted. The left adrenal gland measured 3.1 cm length x 0.97 cm width at the caudal pole. The right adrenal gland measured 2.7 cm length x 1.0 cm width at the caudal pole.

**INTERPRETED BY**

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

**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. Subtle hyperechoic perihilar nodules, consistent with benign myelolipomas were present. 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.

**IMAGING PERFORMED BY**  
 Rebekah Jakum, CVT  
 ARDMS/RVT

**HOSPITAL NAME**

Maple Hills VH

**Liver/ Gallbladder**

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.

**REFERRING VET**

Dr. Eckman

**INVOICE**

14236

**DATE**

7/6/22



**PATIENT** *Gastrointestinal*

Maddie Ingersoll 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. The ventral gastric body wall width measured 0.36 cm.

**SPECIES**

Canine 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. The small intestinal wall width measured 0.36 cm.

**BREED**

Australian Cattle Dog Mix The colon exhibited intact yet mildly prominent wall layering present in the descending colon. The descending colon was primarily empty containing mild subjective semi-formed feces and luminal gas. The descending colon wall width measured 0.28 cm.

**SEX**

FS 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.

**AGE**

2009 *Free Abdomen*

**WEIGHT**

45 No overt lymphadenopathy or peritoneal effusion was present.

**ULTRASONOGRAPHIC FINDINGS**

- Nonspecific mild chronic renal changes
- Bilateral prominent adrenal glands
- Hepatopathy - subjectively benign, vacuolar hepatic changes, nonobstructive cholestasis, primary or concurrent inflammatory hepatopathy possible
- Mild gallbladder debris (non-mucocele)
- Overtly normal gastrointestinal tract - potential for inflammatory bowel episode

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Rebekah Jakum, CVT ARDMS/RVT

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**HOSPITAL NAME**

Maple Hills VH

Hepatosupportive medications including Denamarin and Ursodiol may prove beneficial. No overt evidence of hepatic or hepatobiliary neoplastic criteria was noted.

**REFERRING VET**

Dr. Eckman

No evidence of gastroenterocolic structural pathology was noted. Dietary indiscretion / food intolerance, occult parasitism, and structurally insignificant inflammatory bowel are possible. Continued as-needed gastrointestinal support, which may include bland or hydrolyzed diet trial and empirical deworming, would be reasonable.

**INVOICE**

14236

The bilateral prominent adrenal glands are nonspecific with considerations including patient variant, benign hyperplasia, or minor adenomatous change. No overt evidence of adrenal neoplastic criteria was noted. Although the gastrointestinal signs do not overtly fit with adrenal hyperfunction, adrenal testing could be considered if clinically indicated.

**DATE**

7/6/22



**PATIENT**

Maddie Ingersoll

**SPECIES**

Canine

**BREED**

Australian Cattle Dog  
Mix

**SEX**

FS

**AGE**

2009

**WEIGHT**

45

**INTERPRETED BY**

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

**IMAGING  
PERFORMED BY**

Rebekah Jakum, CVT  
ARDMS/RVT

**HOSPITAL NAME**

Maple Hills VH

**REFERRING VET**

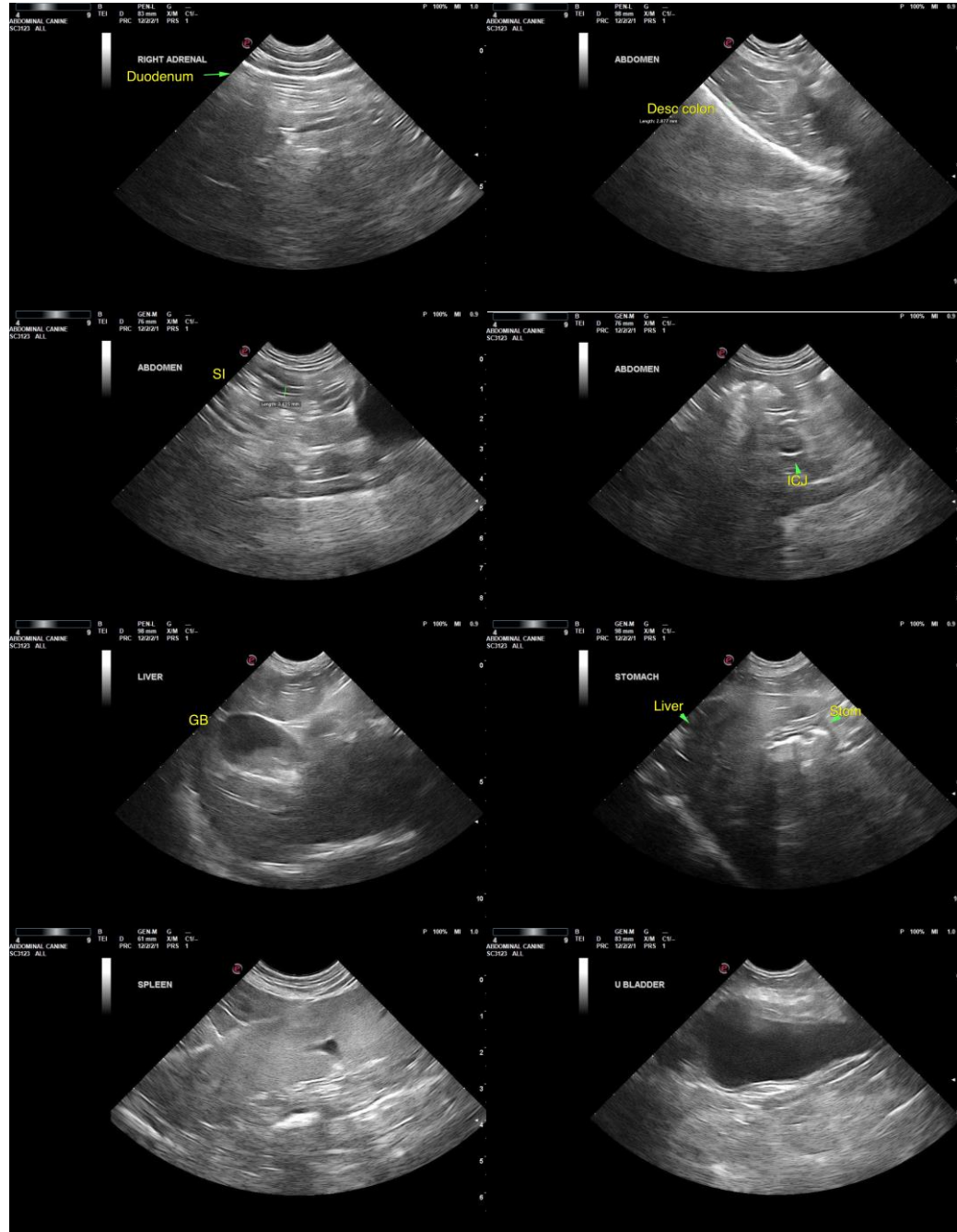
Dr. Eckman

**INVOICE**

14236

**DATE**

7/6/22





**PATIENT**

Maddie Ingersoll

**SPECIES**

Canine

**BREED**

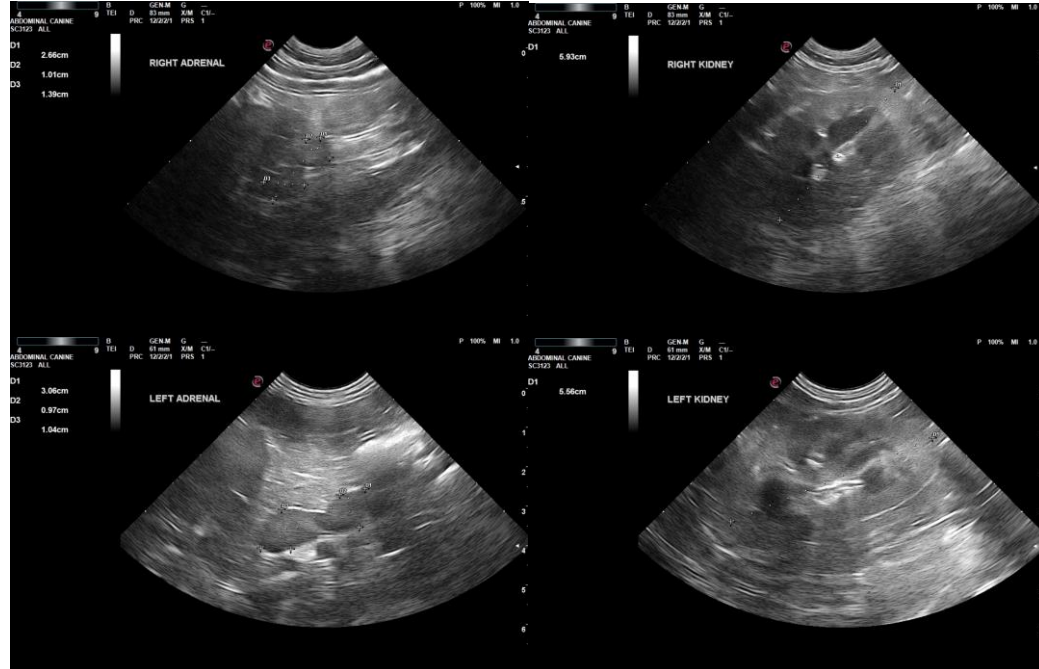
Australian Cattle Dog  
Mix

**SEX**

FS

**AGE**

2009



**WEIGHT**

45

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.

**INTERPRETED BY**

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

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)

**IMAGING PERFORMED BY**

Rebekah Jakum, CVT  
ARDMS/RVT

**HOSPITAL NAME**

Maple Hills VH

**REFERRING VET**

Dr. Eckman

**INVOICE**

14236

**DATE**

7/6/22