



**PATIENT**

Ollie Shaw

**SPECIES**

Canine

**BREED**

Australian Cattle Dog  
X

**SEX**

Neutered male

**AGE**

12 years

**WEIGHT**

53.3 pounds

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Couser

**HOSPITAL NAME**

Willamette Veterinary  
Hospital

**REFERRING VET**

Dr. Couser

**INVOICE**

10083ag

**DATE**

03/01/2022

**PRESENTING CLINICAL SIGNS**

History: Presented 2/28 for vomiting and lethargy. Fever 106 on presentation. Abd painful on presentation. Labs - see below. Started IVF & broad spectrum Abx. P ate when food was offered 2/28 afternoon despite ongoing fever ~104. No interest in food at 10 pm so food was held for several hours to perform US. P remains febrile in 104-105 range.

Abnormal PE/Chem/CBC/UA Results: CBC = WBC 18.47 k/ul, NEU 14 k/ul, bands (RBC and PLT wnl) - chem 17 = ALT 227 u/l all other values wnl. - EPOC = pCO2 19.6 mmHg, BE -10.0, Bicarb 13.9 all other values wnl. - In house fecal = NSF No obvious ova or parasites seen. - FAST SCAN no free fluid, hyperechoic mesentery cranial abdomen around pancreas. - 3 view abdominal radiographs GI tract empty, adequate detail - snap cPL = normal

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2 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.

Normal size and margination was present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some mildly 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 6.8 cm in length. The right kidney measured 5.5 cm in length.

The area of the residual prostate appears normal and free of pathology.

The area of the aortic trifurcation was free of pathology.

**Adrenal Glands**

The left adrenal gland was indistinctly visualized but without overt pathology. The left adrenal gland measured 0.72 cm width at the caudal pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.61 cm width at the caudal pole and 0.56 cm width at the cranial 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**

The liver presented mildly enlarged in size. The hepatic parenchyma was mildly hypoechoic with mild increased subjective prominence of the portovascular borders. The capsule of the liver was normal in margination. Distinct masses or nodules were not evident.

The gallbladder was non-distended in size. The gallbladder wall had a minor thickened appearance consisting of an echogenic double rim corresponding to the inner and outer portions of the wall. This is consistent with gallbladder wall edema. Possible causes may include acute inflammation, edema and



**PATIENT**

anaphylaxis. Anechoic content was present without sediment or calculi. The common bile duct was normal.

Ollie Shaw

**Gastrointestinal**

**SPECIES**

The stomach presented mild wall thickening secondary to echogenic mucosa hypertrophy. Intact wall layering was maintained and distinct. The gastric body wall measured 0.69 cm width. Mild gastric distension with a mild amount of retained anechoic fluid was present without evidence of distension secondary to retained ingesta or foreign material.

Canine

**BREED**

Australian Cattle Dog  
X

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio with minor duodenal ileus. The lumen of the small intestine was empty with no overt signs of obstruction or foreign material. The duodenal wall measured 0.54 cm.

**SEX**

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

Neutered male

**Pancreas**

**AGE**

The parenchyma of the left limb, body and right limb of the pancreas appeared to be normal in size and contour. The parenchyma was subtly hypoechoic compared to the adjacent reactive peripancreatic to cranial abdominal omentum.

12 years

**Free Abdomen**

**WEIGHT**

Generalized reactive mesentery noted in the cranial abdomen. No free fluid or evidence of significant lymphadenopathy.

53.3 pounds

**INTERPRETED BY**

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

**ULTRASONOGRAPHIC FINDINGS**

- Mild chronic renal changes.
- Hepatopathy-subjectively acute, given the ALT elevation, acute nonspecific hepatitis (viral, bacterial, leptospirosis, toxin etc.), reactive hepatopathy or congestion. Occult neoplasia considered a less likely differential diagnosis but cannot be definitively excluded.
- Non distended gallbladder with minor wall edema-edema potentially secondary to acute cholecystitis, emerging portal hypertension or less likely anaphylaxis.
- Subtle hypoechoic pancreas-nonspecific, patient variant given the normal CPL. Potential for low grade inflammation possible.
- Nonspecific cranial abdominal to generalized reactive mesentery, no peritoneal free fluid.

**IMAGING PERFORMED BY**

Dr. Couser

**HOSPITAL NAME**

Willamette Veterinary  
Hospital

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**REFERRING VET**

Dr. Couser

The reactive mesentery may be secondary to acute hepatopathy, upper gastrointestinal inflammation or low grade to resolving pancreatitis. Potential for low grade to resolving pancreatitis would be suspected if evidence of cranial abdominal or subxiphoid discomfort on palpation.

**INVOICE**

10083ag

Further assessment of the liver if normal clotting status may include ultrasound guided FNA for screening cytology as well as leptospirosis titer/PCR.

**DATE**

03/01/2022

Empirically, continued as needed gastrointestinal support including broad spectrum antibiotics given the fever as well as therapy for potential acute hepatitis with monitoring of ALT levels would be reasonable.



**PATIENT**

Ollie Shaw

**SPECIES**

Canine

**BREED**

Australian Cattle Dog  
X

**SEX**

Neutered male

**AGE**

12 years

**WEIGHT**

53.3 pounds

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Couser

**HOSPITAL NAME**

Willamette Veterinary  
Hospital

**REFERRING VET**

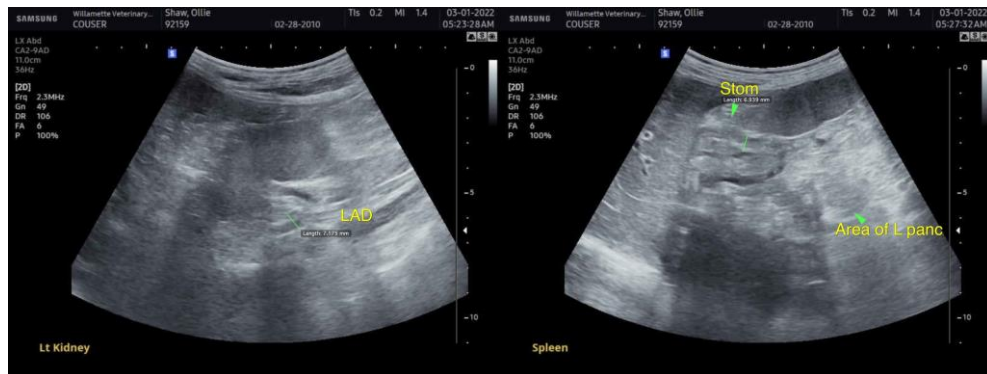
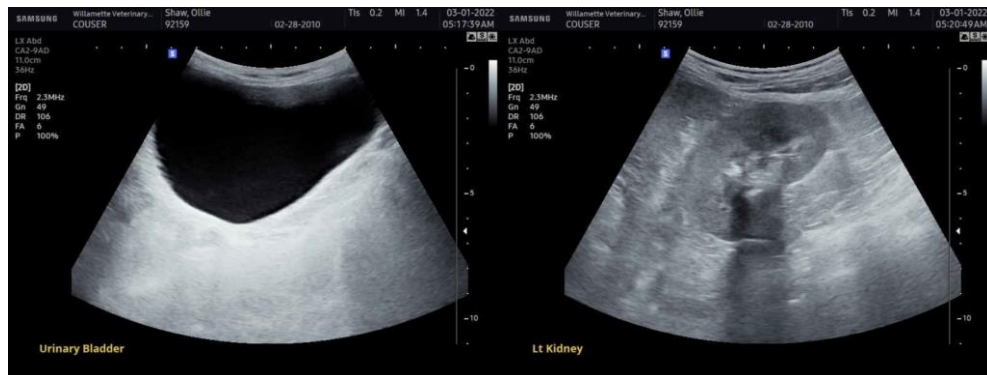
Dr. Couser

**INVOICE**

10083ag

**DATE**

03/01/2022





**PATIENT**

Ollie Shaw

**SPECIES**

Canine

**BREED**

Australian Cattle Dog  
X

**SEX**

Neutered male

**AGE**

12 years

**WEIGHT**

53.3 pounds

**INTERPRETED BY**

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

**IMAGING  
PERFORMED BY**

Dr. Couser

**HOSPITAL NAME**

Willamette Veterinary  
Hospital

**REFERRING VET**

Dr. Couser

**INVOICE**

10083ag

**DATE**

03/01/2022



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