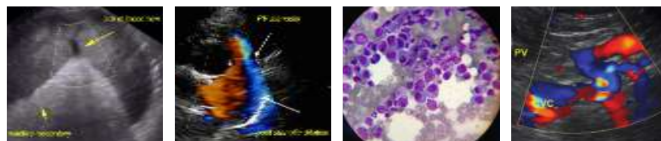


SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Blade Runions

SPECIES

Canine

BREED

German Shepherd

SEX

MN

AGE

4 years

WEIGHT

84.3 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Couser

HOSPITAL NAME

Willamette VH

REFERRING VET

Dr. Couser

INVOICE

13241

DATE

2/4/22

PRESENTING CLINICAL SIGNS

1/28/22 - went to rDVM for lethargy and anorexia, no v/d at that time. Fecal direct negative, no salmon fluke eggs seen. outpatient care with cerenia, metro, bland diet. 1/31 - returned to rDVM for ongoing anorexia, still no v, 1 wk of no BM. CBC = HCT 57%, platelets 31k, WBCs wnl 14k. Chem = all wnl. Gave barium. 2/1 at rDVM - drooling, vomiting, hosp for IVF, developed diarrhea, Recheck rads: barium had moved to colon. 2/3 - returned to rDVM for IVF, repeat barium, stomach distended and barium in stomach at 30min post admin. CBC = WBCs HCT 62%, 24.5k, platelets 15k. Chem = Alb 1.6, BUN 52, Crea 1.5. 2/3/22 afternoon: Referred to WVH for ongoing workup & treatment for vomiting & diarrhea. Temp 102.8 on arrival. At wilvet - 4 pm: EPOC = iCa 1.07, Crea 1.76, Glu 125, lactate 3.05, BUN 59 PCV/TS = 68%, 7.0 BP = 162/91 (113) Fecal direct = no ova/flukes seen. 3 view abdominal radiographs = barium still in stomach, mild gastric dilation but improved from rDVM rads from today, adequate serosal detail. 3 view thoracic radiographs = no evidence of pneumonia, suspect enlarged sternal LNN, possible pleural fluid in left cranial lube lobe region on right lateral rad, increased mediastinal soft tissue opacity. 6 pm: PT = 15 sec (wnl) PTT 108 sec (mildly elevated). BG = 94. 7 pm - Gave 1 Unit platelet rich plasma. 7 pm - BG 94 11 pm BG 100 11 pm - PCV 52%, TS 4.8 g/dl. EPOC - NSF. Creat 0.67, Glu 99, K 3.9, LAC 1.49, pH 7.4, BUN 19, HCT 49%
Abnormal PE/Chem/CBC/UA Results: As of 2/4/22 early AM: P remains QDR. Ongoing diarrhea, no longer hemorrhagic, now pale brown liquid. No vomiting or regurgitation. Temp 102.1.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and cystourethral junction exhibited normal thickness and tone. Primarily anechoic urine was present in the lumen. Mild to moderate, primarily dependent, particulate sediment was present without evidence of calculus formation. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic mural changes were noted.

No overt pathology was noted In the area of the residual prostate, although indistinctly visualized.

The area of the aortic trifurcation was free of pathology.

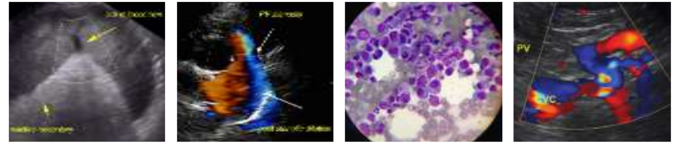
Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio and normal corticomedullary definition were maintained. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pelvic dilation. The left kidney measured 8.4 cm in length. The right kidney measured 8.7 cm in length.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.84 cm width at the caudal pole and 0.83 cm width at the cranial pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.65 cm width at the caudal pole and 0.67 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



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Blade Runions

SPECIES

Canine

BREED

German Shepherd

SEX

MN

AGE

4 years

WEIGHT

84.3 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Couser

HOSPITAL NAME

Willamette VH

REFERRING VET

Dr. Couser

INVOICE

13241

DATE

2/4/22

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 exhibited potential for mild generalized enlargement. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with primarily anechoic luminal content. The cystic and common bile ducts were normal.

Gastrointestinal

The stomach presented wall thickening secondary to echogenic mucosa hypertrophy. Intact wall layering was maintained and distinct. The stomach was empty with mild luminal gas. No overt evidence of retained Ingesta, fluid, foreign material, or barium was noted. No evidence of mechanical pyloric outflow obstruction. The ventral gastric body wall width measured 0.65 cm.

The intestinal walls demonstrated intact wall layering and primarily maintained a 1:3 muscularis / mucosa ratio. The mucosa exhibited mildly decreased echogenicity with occasional mucosal speckling. Generalized mild to moderately thickened duodenum exhibiting intact to indistinct wall layering and corrugation was present. A segmental to diffuse ileus pattern consisting of mild fluid accumulation in the intestinal lumen was present without obstruction or foreign material. The jejunum wall width measured 0.37 cm. The duodenum wall width measured 0.52 cm.

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

Pancreas

The pancreas was overtly normal without evidence of active inflammation. Potential for low-grade pancreatitis could be present, yet sonographically normal.

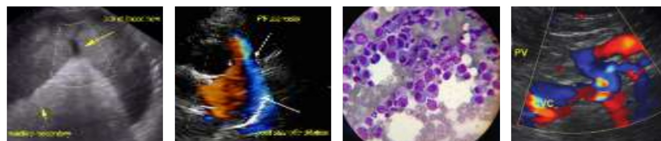
Free Abdomen

Multiple, primarily cranial and mid mesenteric lymph nodes were present. These lymph nodes were homogenous, mildly hypoechoic and smoothly marginated. A normal width: length ratio was maintained (<0.5). Evidence of perilymphatic inflammation was evident. An example of lymph node size was 6.0 cm x 2.0 cm. No overt effusion was noted. Generalized reactive primarily peri intestinal to perilymphatic mesentery was present.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Acute generalized gastroenteritis pattern with marked duodenitis
- Associated multiple mesenteric lymphadenitis and generalized primarily peri intestinal to perilymphatic reactive mesentery
- Mild urinary bladder sediment - likely cellular or crystalline debris
- Probable mild reactive hepatomegaly



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Blade Runions

SPECIES

Canine

BREED

German Shepherd

SEX

MN

AGE

4 years

WEIGHT

84.3 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Couser

HOSPITAL NAME

Willamette VH

REFERRING VET

Dr. Couser

INVOICE

13241

DATE

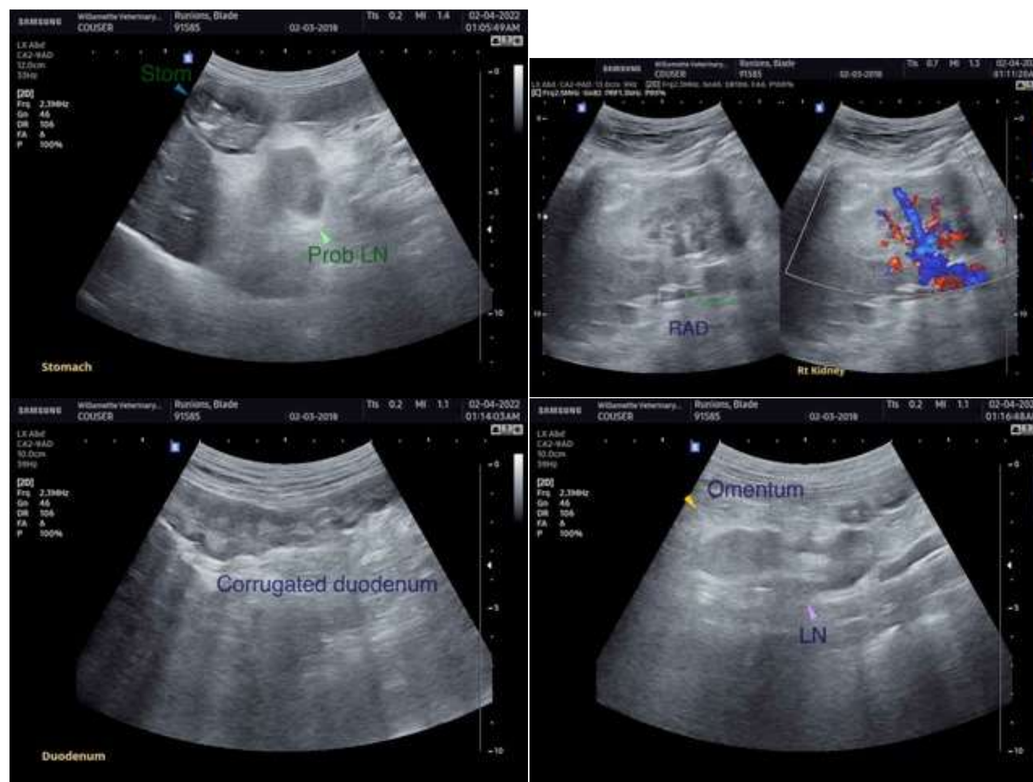
2/4/22

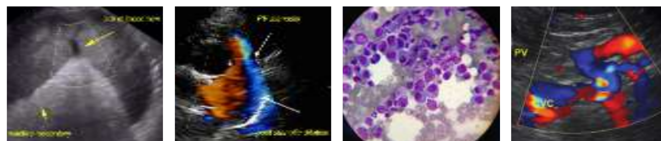
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The overall appearance of the gastrointestinal tract was most suggestive of acute inflammatory bowel episode without overt evidence of mechanical obstruction or foreign material. Considerations may include dietary indiscretion, infectious gastroenterocolitis, dysbiosis, acute onset inflammatory bowel disease/PLE, gastro enterotoxic insult, occult infiltrative GI neoplasia, are all possible.

The associated mesenteric lymphadenopathy is suggestive of concurrent lymphadenitis, although the possibility of emerging neoplastic lymphadenopathy cannot be definitively excluded. If accessible, ultrasound guided FNA of a mesenteric lymph node, assuming normal clotting status, could be considered for screening cytology +/- C/S.

Empirically, broad spectrum antibiotics, plasma expanders, given the hyperalbuminemia, as-needed gastrointestinal support, prophylactic deworming, and high colony count probiotics such as Proviable may be considered with an assessment of clinical response. A GI panel to include PLI/TLI/Cobalamin/Folate is recommended.





SonoPath.com™
1-800-838-4268 info@sonopath.com

PATIENT

Blade Runions

SPECIES

Canine

BREED

German Shepherd

SEX

MN

AGE

4 years

WEIGHT

84.3 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Couser

HOSPITAL NAME

Willamette VH

REFERRING VET

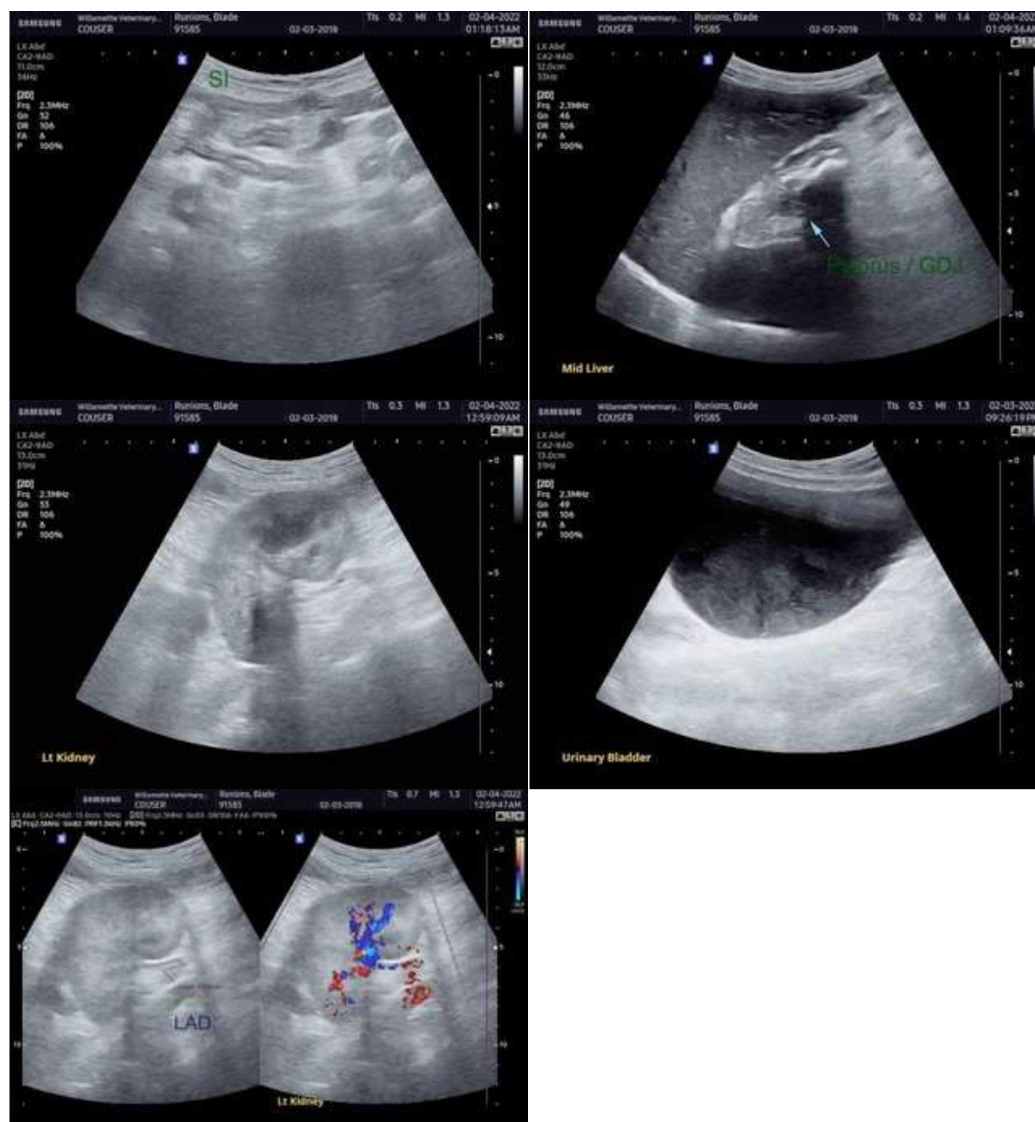
Dr. Couser

INVOICE

13241

DATE

2/4/22



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