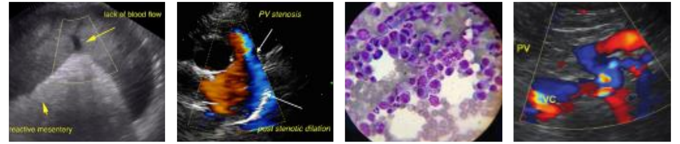


SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT
Rowdee Kleinschmidt

SPECIES
Canine

BREED
West Highland White Terrier

SEX
M/N

AGE
12 years

WEIGHT
10.8 kg

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

IMAGING PERFORMED BY
Patti Mayfield DVM

HOSPITAL NAME
Bend Animal Emergency & Specialty Center

REFERRING VET
Adam Stone DVM

INVOICE
14616

DATE
8/13/22

PRESENTING CLINICAL SIGNS

Vomiting of unknown origin: Patient presented on 8/12/2022 for agitation, pacing, and panting following a visit to the dog park. He also began digging in the back yard, which is unusual. Diagnostics were performed, which were unremarkable and he was treated with SQF and Cerenia. He returned to Bend Animal Emergency at 8/13/2022 for recheck exam as he continued to act painful, dumpy, and lethargic. O said he was not able to sleep as he was so uncomfortable. He regurgitated several times last night consisting of bile. He did drink some water and kept it down. Current treatments: IVC Norm-R 40ml/hr Buprenorphine 0.11mg IV q8h Maropitant 11mg IV q24h
Abnormal PE/Chem/CBC/UA Results: PE: Abdominal Pain, ~5-6% dehydrated, poorly compliant and growling. Moderate pot-belled abdomen. RADIOGRAPHS: - Unremarkable, no obvious signs of obstruction Blood work (8/13/2022) CBC: NSF, PCV/TP: 45%/6.4 g/dL CHEM: All WNL ALP, ALT, GGT are WNL 145/73=97 Osc. NIBP purple small cuff

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

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 was noted.

The residual prostate was free of pathology.

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 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 5.6 cm in length.

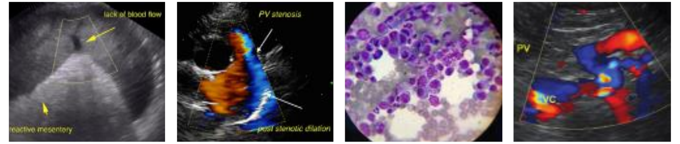
Adrenal Glands

A well-defined, hyperechoic nodule was present in the caudal pole of the left adrenal gland with mild associated symmetrical capsule expansion. The nodule did not exhibit signs of mineralization or overt vascular invasion. The nodule measured 0.64 cm x 0.60 cm. The overall left adrenal gland measured 2.4 cm x 0.71 caudal pole width.

The right adrenal gland exhibited overall mild enlargement yet maintained symmetrical contour and capsule Integrity with nonhomogeneous parenchyma without evidence of parenchyma mineralization. A nonhomogeneous echogenic nodule was present in the cranial pole measuring 1.1 cm x 0.97 cm. No overt evidence of vascular invasion was evident. The overall right adrenal gland measured 2.5 cm length x 1.2 cm width at the cranial pole and 0.98 cm width at the caudal pole.

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



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

PATIENT
Rowdee Kleinschmidt

SPECIES
Canine

BREED
West Highland White Terrier

SEX
M/N

AGE
12 years

WEIGHT
10.8 kg

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

IMAGING PERFORMED BY
Patti Mayfield DVM

HOSPITAL NAME
Bend Animal Emergency & Specialty Center

REFERRING VET
Adam Stone DVM

INVOICE
14616

DATE
8/13/22

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.

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. A solitary discrete, nondisruptive hyperechoic nodule was present in the deep mid liver measuring 1.3 cm diameter. The hepatic and portal vasculature were normal in appearance without signs of congestion. A solitary thinly walled intraparenchymal hepatic cyst containing anechoic fluid was present in the mid liver measuring 1.0 cm in diameter. The gallbladder was non distended in size with echogenic, nonmineralized, non dependent biliary sludge. The biliary sludge was non organized with a hypoechoic to anechoic, irregular to interrupted rim visible between the nondependent sludge and inner wall. No signs of peripheral gallbladder inflammation.

Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with mild luminal gas and no signs of ileus, obstruction, or foreign material. The gastric body wall width measured 0.45 cm.

The small intestine presented intact yet segmentally prominent wall layering in the duodenum and jejunum. The duodenum wall measured 0.54 cm width. The jejunum wall measured 0.43 cm width.

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

Pancreas

The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.

Free Abdomen

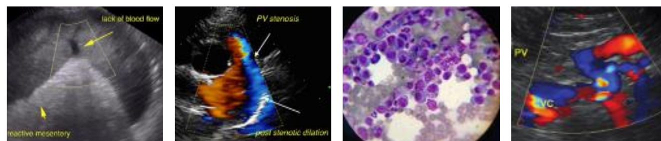
A solitary midabdominal mesenteric node was present medial to the spleen. The lymph node was essentially isoechoic to adjacent omentum without evidence of peripheral inflammation and maintaining a normal width: length ratio (<0.5). The lymph node measured 2.4 cm x 0.8 cm. No evidence of peritoneal free fluid was noted.

ULTRASONOGRAPHIC FINDINGS

- Mild chronic renal changes
- Bilateral nodular adrenal glands with mild right adrenomegaly
- Hepatic parenchymal remodeling with solitary likely benign intraparenchymal nodule and hepatic cyst - hepatic nodule likely consistent with benign lipogranuloma or focal nodular hyperplasia
- Partial to emerging gallbladder mucocele - subjectively not inflamed

SonoPath
Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT
Rowdee Kleinschmidt

SPECIES
Canine

BREED
West Highland White Terrier

SEX
M/N

AGE
12 years

WEIGHT
10.8 kg

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

IMAGING PERFORMED BY
Patti Mayfield DVM

HOSPITAL NAME
Bend Animal Emergency & Specialty Center

REFERRING VET
Adam Stone DVM

INVOICE
14616

DATE
8/13/22

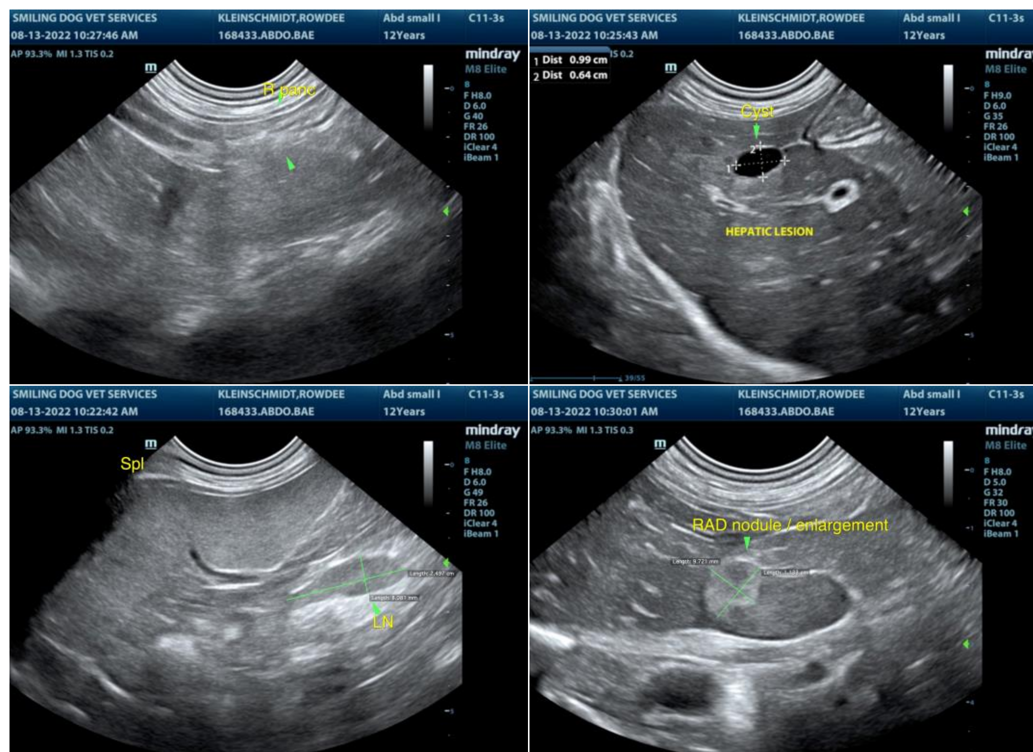
- Heterogeneous pancreas - age/patient variant, potential for remodeling owing to previous inflammation or low-grade to chronic pancreatitis
- Mild gastroenteritis pattern with solitary subjective benign / reactive mesenteric lymph node

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The emerging to partial gallbladder mucocele is of unclear clinical significance given the lack of sonographic Inflammation, as well as reported hepatic enzyme elevations. Continued monitoring for evidence of lab work abnormalities and cranial abdominal / subxiphoid discomfort going forward with potential recheck sonogram advised. Ursodiol therapy is recommended.

The adrenal presentation may indicate adenomatous change, benign or age-related hyperplasia, while potential for emerging neoplastic criteria, specifically in the right adrenal gland, i.e., pheochromocytoma, adenocarcinoma, or other, is possible. Continued monitoring for evidence of systemic hypertension, which may allude to a pheochromocytoma, is recommended. Assessment of T4 levels is suggested as hypothyroidism has been associated with gallbladder mucoceles. Sonographic monitoring of the right adrenal gland for evidence of progressive enlargement or nodular changes with initial recheck ideally in 4-6 weeks is recommended.

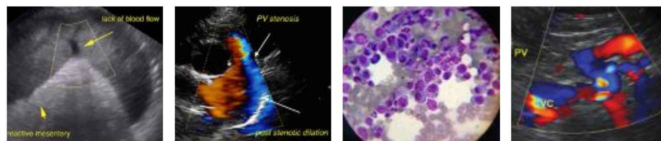
Empirically, therapy for probable gastroenteritis and/or low-grade pancreatitis with continued monitoring would be reasonable.



SonoPath

Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com

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

PATIENT
Rowdee Kleinschmidt

SPECIES
Canine

BREED
West Highland White Terrier

SEX
M/N

AGE
12 years

WEIGHT
10.8 kg

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

IMAGING PERFORMED BY
Patti Mayfield DVM

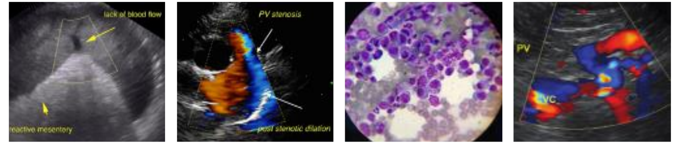
HOSPITAL NAME
Bend Animal Emergency & Specialty Center

REFERRING VET
Adam Stone DVM

INVOICE
14616

DATE
8/13/22

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.



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

PATIENT
Rowdee Kleinschmidt

SPECIES
Canine

BREED
West Highland White Terrier

SEX
M/N

AGE
12 years

WEIGHT
10.8 kg

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

IMAGING PERFORMED BY
Patti Mayfield DVM

HOSPITAL NAME
Bend Animal Emergency & Specialty Center

REFERRING VET
Adam Stone DVM

INVOICE
14616

DATE
8/13/22

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