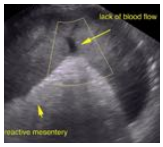
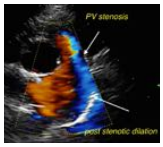
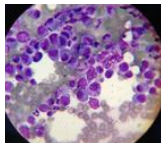
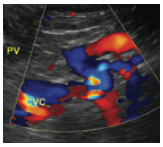
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™





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

PATIENT

Loki Abeyta

SPECIES

Feline

BREED

Domestic Longhair

SEX

Neutered male

AGE

13 years

WEIGHT

4.07 kg

INTERPRETED BY

Eric Lindquist, DMV DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Bennett

HOSPITAL NAME

Wilvet South

REFERRING VET

Dr. Bennett

INVOICE

42741

DATE

2/14/23

PRESENTING CLINICAL SIGNS

History: Age is approx. P was a neighborhood cat that O adopted in 2016. In 2016, had multiple extractions and diagnosed with significant heart murmur. Echo in 2021 diagnosed hypertrophic obstructive cardiomyopathy. No meds at that time (P is extremely difficult to medicate). Murmur has been static at grade 5-6/6. History of chronic vomiting, typically partially digested food or hairballs. Today presents for multiple episodes of vomiting in past 24 hours, with progressively more blood seen each time. Lethargic, hiding. Vomited in exam room. Definitely retching, not coughing. Produced a large puddle of red fluid with a few blood clots, no "coffee grounds" noted.
Abnormal PE/Chem/CBC/UA Results: Exam: grade 5/6 parasternal systolic murmur, lungs clear, eupneic. Severe dental disease. Abd tender in cranial abdomen. CBC: HCT 46%, WBC 31.06k, Neut 26.43k, suspect bands, Mono 0.86k, rest WNL. Chem17: Glu 163, Crea 3.0, BUN 84, ALKP <10, rest WNL. Lytes: All WNL. UA: USG 1.034, pH 6.0. No bacteria noted on sediment. Three-view whole body rads: FINDINGS: There is a small amount of gas and fluid seen within the stomach. The small intestines are fluid-filled but not distended. There is gas and fecal material within the colon. The renal silhouettes are mildly rounded and slightly small. The urinary bladder is within normal limits. The cardiac silhouette is mildly enlarged with the vertebral heart score of 8.43. The lobar vasculature is within normal limits without evidence of lobar arterial or venous distention. There is a diffuse mild broncho interstitial opacification of the pulmonary parenchyma. There are no additional abnormalities seen on the study. CONCLUSIONS: The cardiac changes may be indicative of cardiomyopathy however other cardiac disease cannot be ruled out. Cardiac decompensation is not identified. The pulmonary changes may be age-related in nature given the lack of reported respiratory signs however chronic infectious or inflammatory lung disease could still be present. The cause for the vomiting is not definitively identified. The gas-filled stomach is relatively mild. Gastritis or pancreatitis could be present. There appears to be renal degenerative changes on this exam which could be contributing to the patient's clinical symptoms. RECOMMENDATIONS: Echocardiogram, and abdominal sonography are recommended on this patient. Further diagnostics and therapy should depend on the results of the pending blood work. Urinalysis is also recommended at this time.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

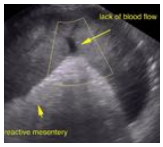
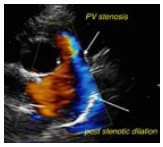
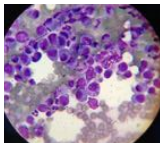
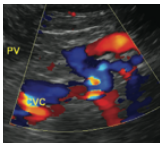
The **urinary bladder** and visible pelvic urethra were unremarkable for the level of repletion presented. The urine, however, did present some mildly echogenic debris consistent with mucous, exfoliated cells from renal or bladder origin, and/or blood clots as these echogenic changes can all present similarly. This is often related to urinary tract infection but may represent simple evidence of exfoliated debris or sterile inflammation. Cystocentesis, urinalysis, +/- culture would be recommended to rule out and define any UTI.

The left **kidney** was irregular in contour with diffuse, hyperechoic cortical changes. This is consistent with interstitial nephrosis and sclerosis type striations with loss of corticomedullary definition. Blood flow was subnormal on color flow assessment. Cortical infarcts were also noted. The right kidney was similar changes to the left. The right kidney had interstitial nephrosis pattern with cortical remodeling. The right kidney measured 3.0 cm.

Adrenal Glands

Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT

Loki Abeyta

SPECIES

Feline

BREED

Domestic Longhair

SEX

Neutered male

AGE

13 years

WEIGHT

4.07 kg

INTERPRETED BY

Eric Lindquist, DMV DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Bennett

HOSPITAL NAME

Wilvet South

REFERRING VET

Dr. Bennett

INVOICE

42741

DATE

2/14/23

Spleen

The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes was noted.

Liver

The **liver** revealed a complex cyst or cystadenoma at the left liver measuring 2.5 cm and appears subjectively benign. Lobar biliary mineralization was noted as well as gallbladder calculus measuring 0.5 cm and was non-obstructive.

Gastrointestinal

Minor fluid filled gastric lumen was noted with minor **gastric** wall thickening. The small intestine was unremarkable. The colonic wall was echogenic in this patient with echogenic and thickened submucosal layer. This is suggestive for chronic colitis.

Pancreas

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

ULTRASONOGRAPHIC FINDINGS

Bladder debris.

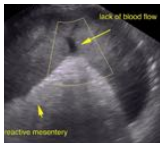
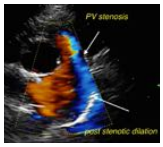
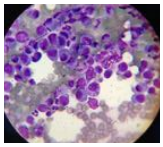
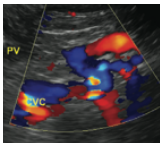
Chronic renal changes, consistent with interstitial nephrosis and infarcts.

Gastritis and colitis pattern.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

End stage degenerative renal disease. Cystadenomatous type left liver lesion and biliary calculi, non-obstructive. 72-hour IV fluid protocol, treatment for GI protectants, blood pressure measurements and urine culture are all indicated. The prognosis long term is guarded based on the renal presentation.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT

Loki Abeyta

SPECIES

Feline

BREED

Domestic Longhair

SEX

Neutered male

AGE

13 years

WEIGHT

4.07 kg

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Bennett

HOSPITAL NAME

Wilvet South

REFERRING VET

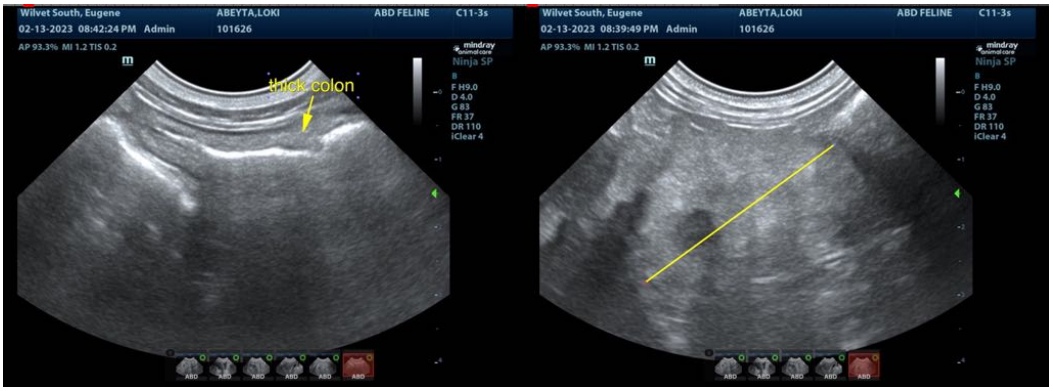
Dr. Bennett

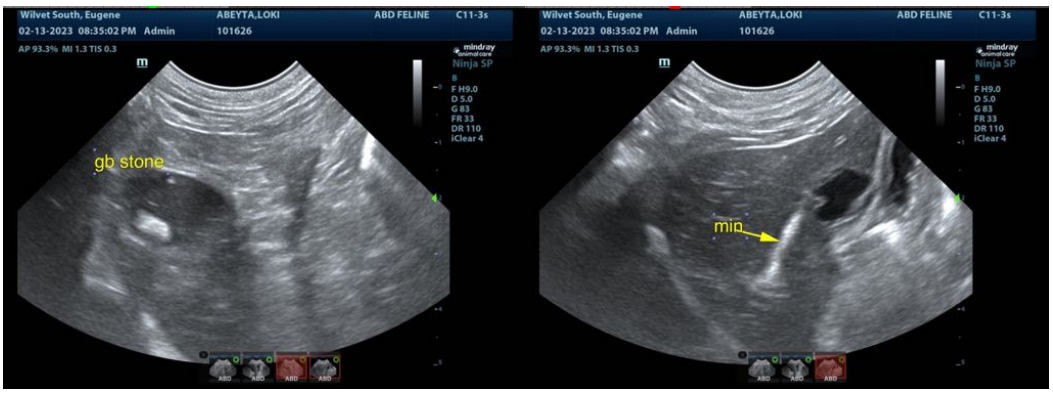
INVOICE

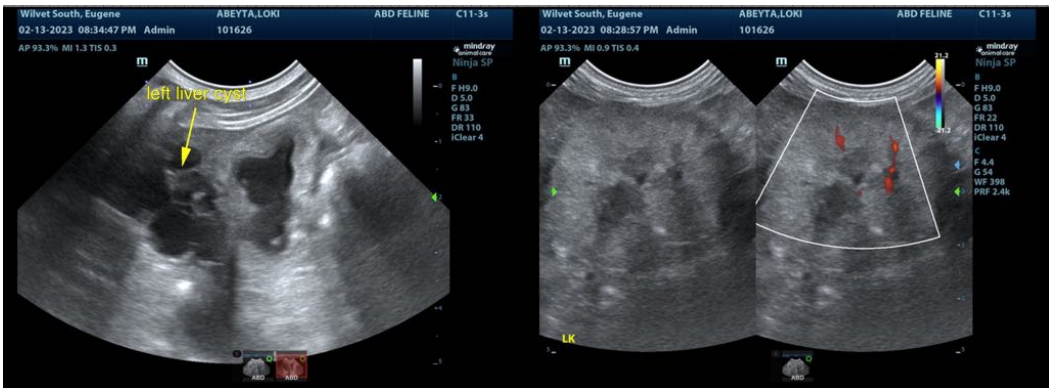
42741

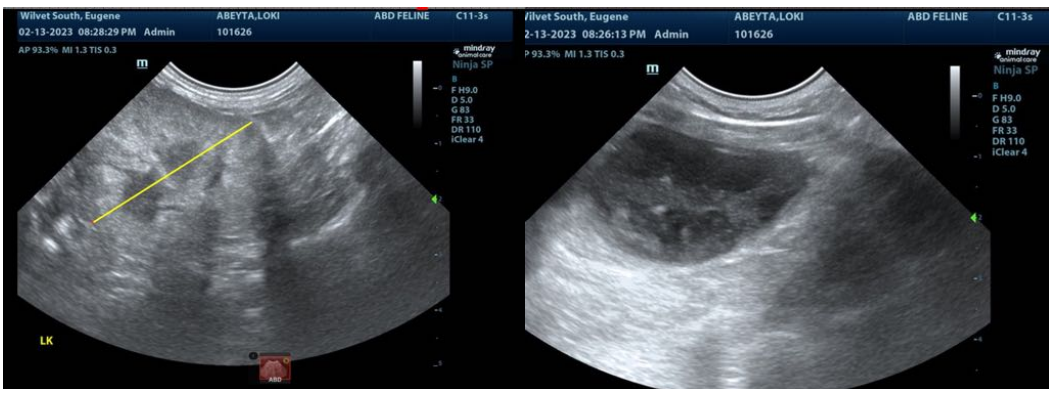
DATE

2/14/23

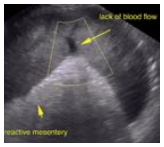


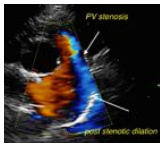


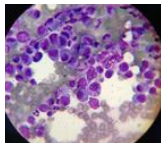
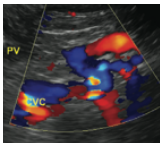




SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™





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

PATIENT

Loki Abeyta

SPECIES

Feline

BREED

Domestic Longhair

SEX

Neutered male

AGE

13 years

WEIGHT

4.07 kg

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Bennett

HOSPITAL NAME

Wilvet South

REFERRING VET

Dr. Bennett

INVOICE

42741

DATE

2/14/23

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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com
info@SonoPath.com