



PATIENT

Nala Savy

SPECIES

Canine

BREED

Yorkie

SEX

Spayed female

AGE

9 years

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

HOSPITAL NAME

Greenwood Lakes AH

REFERRING VET

Dr. Louer

INVOICE

43541

DATE

3/28/23

PRESENTING CLINICAL SIGNS

Hyporexia, history of pancreatitis, history of seizures.

Albumin 8.4, ALP 953, ALT 69, Glucose 430, CL 100, Cholesterol 463, Triglycerides 1116, PSL 563, bands 588, mono 2744, neutron 14308

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The pelvic urethra was imaged 2.0 cm beyond the cystourethral junction and appeared normal. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes was noted. Ureteral papillae were normal.

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for his age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. The left kidney measured 4.88 cm. The right kidney measured 5.07 cm.

Adrenal Glands

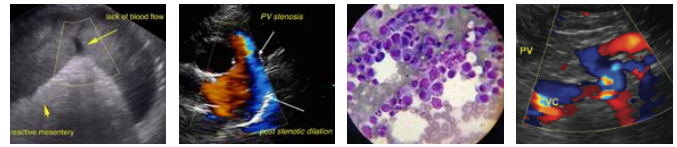
Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The left adrenal gland measured 1.75 x 0.57 cm. The right adrenal gland measured 2.18 x 0.83 cm at the cranial pole and 0.64 cm at the caudal pole.

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** was uniform with no intrahepatic dilation present. The gallbladder was unremarkable. The cystic duct was unremarkable. The portal vein was patent and no overt thrombus was noted on Power Doppler assessment. However, the portal vein appeared slightly thickened.



PATIENT

Nala Savy

Gastrointestinal

SPECIES

Canine

The **stomach** itself was empty as was the duodenum, yet the pancreatic pathology impinged upon, adhered or enveloped the upper gastrointestinal tract. The distal small intestine and colon were unremarkable.

BREED

Yorkie

Pancreas

SEX

Spayed female

The **pancreas** in this patient revealed extensive, mixed, hypoechoic non-vascular mass. This is consistent with pancreatic necrosis with areas of coalesced fluid and hyperechoic surrounding fat/granulomatous bed. Tissue was evaluated with Power Doppler and minimal to no blood flow to this entire region of 6.5 cm of pathology. This appeared to be adhered to the serosa of the gastric fundus and portions of the pancreatic pathology extended to the right base of the pancreas impinging upon the common bile duct which is mildly dilated and thickened to 0.6 cm. This is consistent with post hepatic obstruction, yet given the bilirubin values are not elevated I would be concerned for an emerging post hepatic obstruction in this patient. Trace amounts of free fluid were noted around the pyloric outflow.

AGE

9 years

ULTRASONOGRAPHIC FINDINGS

INTERPRETED BY

Extensive pancreatic necrosis pattern, void of vascularity.

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

HOSPITAL NAME

Greenwood Lakes AH

REFERRING VET

Dr. Louer

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Progressive ALKP elevations and bilirubinuria should be monitored carefully until eventual intervention. Microthrombosis within the pancreatic vasculature may be an issue. There is a mild potential for carcinoma; however, I would expect power Doppler positive signals in such a scenario. Ultrasound-guided FNA of the pancreatic tissue can be considered as a screening purpose; however, surgical intervention is inevitable given the lack of blood flow to the pathology and the enormous amount of pathology that is completely necrotic for this size patient at 6+ cm. I recommend surgical intervention with debridement of the necrotic tissue and liberation of adhesions and the common bile duct and adhesions upon the stomach and upper duodenum. J tube placement may be best given the diagnostic state and the necessity for maintaining nutrition. Surgical intervention with internal medicine monitoring would be best in this patient. Recheck sonogram is recommended every 24-72 hours post surgery until adequate resolution of the pancreatic, upper GI pathology and common bile duct pathology have been achieved. The prognosis is guarded. Full coagulation panel is warranted as well as assessment for potential for thromboembolic disease given the extent of the pancreatic pathology.

INVOICE

43541

Internal medicine consult can be utilized through SonoPath.com. You can select the internal medicine drop down at <http://spa.sonopath.com/>.

DATE

3/28/23

One of the world's top internists & SonoPath associate Dr. Remo Lobetti BVSc, MMedVet, PhD, DECVIM can evaluate your case through SonoPath. <https://sonopath.com/resources/sonopath-services/internal-medicine-teleconsultation-services>



PATIENT

Nala Savy

SPECIES

Canine

BREED

Yorkie

SEX

Spayed female

AGE

9 years

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

HOSPITAL NAME

Greenwood Lakes AH

REFERRING VET

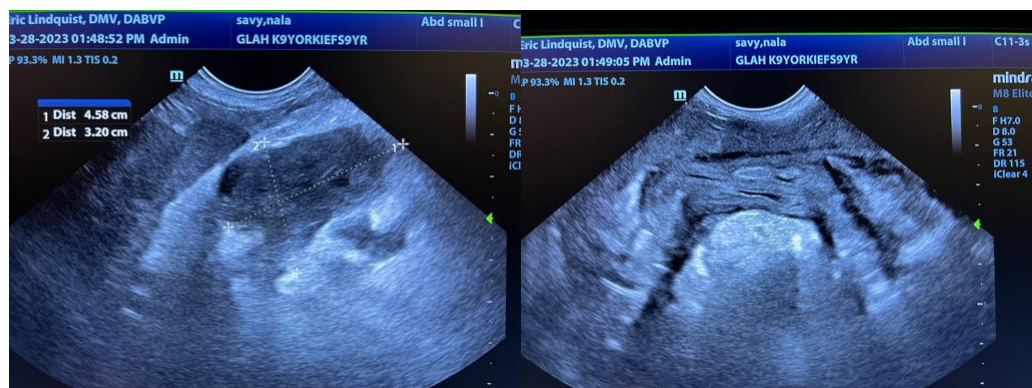
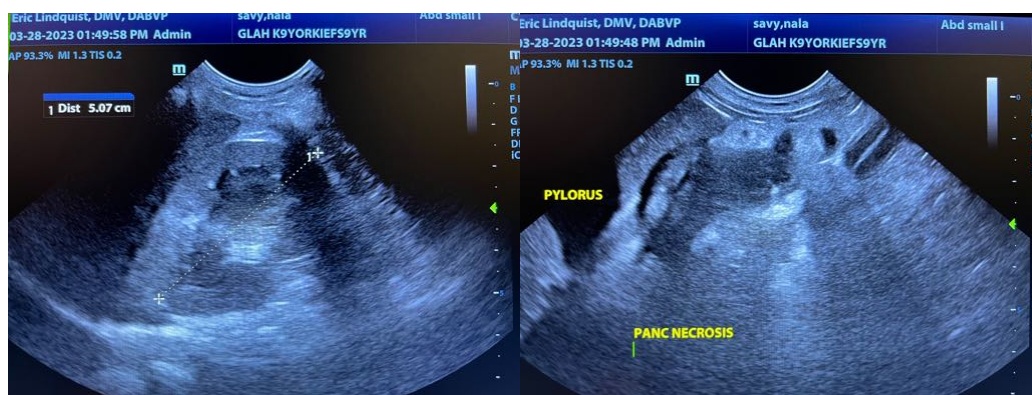
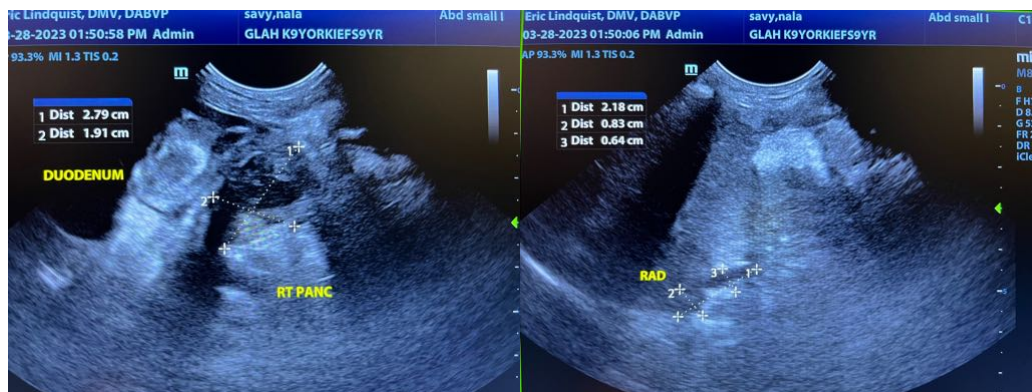
Dr. Louer

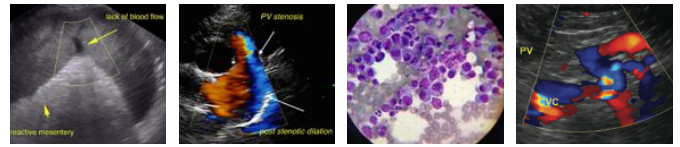
INVOICE

43541

DATE

3/28/23





PATIENT

Nala Savy

SPECIES

Canine

BREED

Yorkie

SEX

Spayed female

AGE

9 years

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

HOSPITAL NAME

Greenwood Lakes AH

REFERRING VET

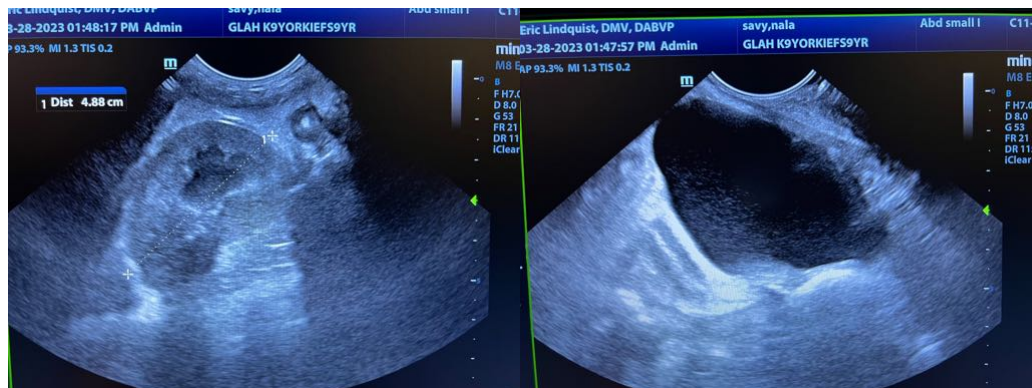
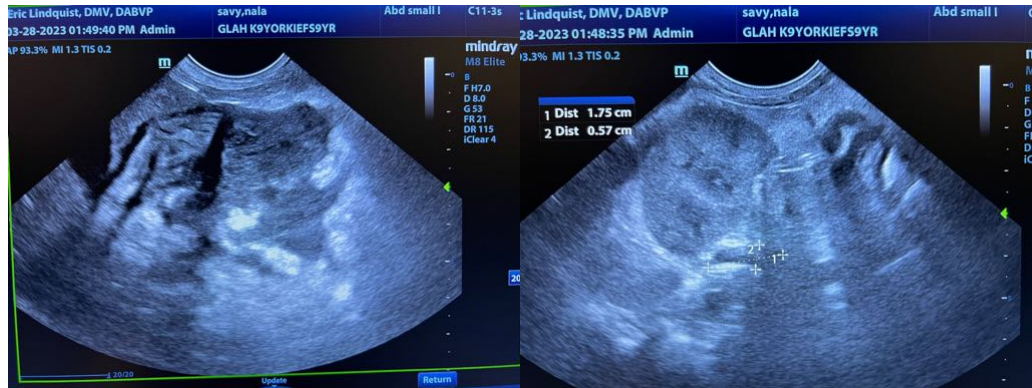
Dr. Louer

INVOICE

43541

DATE

3/28/23



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