



**PATIENT**

Pompom Cortez

**SPECIES**

Canine

**BREED**

Pomeranian

**SEX**

Neutered male

**AGE**

14 years

**WEIGHT**

5.1 kg

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Erin Wicks

**HOSPITAL NAME**

Shores VEC

**REFERRING VET**

Dr. Lupole

**INVOICE**

31499

**DATE**

7/7/22

**PRESENTING CLINICAL SIGNS**

Presented at our hospital for lethargic, not eating, and increased liver enzymes. Patient has been having ongoing issues for 6 months to a year. Patient was doing good but owner says liver enzymes started increasing a month ago. Last 2-3 days patient was not eating. They took him to good hope where it was determined that his liver enzymes were above 3000. They gave medications but patient is refusing to eat and won't take the medication. Previous Health Concerns: heart issues; increased liver enzymes; kidney disease Current Medications/Supplements/OTC: Cerenia; mirtazapine; enrofloxacin; metronidazole

Abnormal PE/Chem/CBC/UA Results: Cardiovascular: Grade 5/6 left sided and Grade 4/6 right side murmur Respiratory: BV sounds all 4 quadrants Abdominal: abdominal distention, no fluid wave, tense cranial abdomen rDVM 7/6 bloodwork: BUN 73 H, Creat 1.9 H, Globulin 5.2 H, ALT 3159 H, ALP 3458 H, GGT 77 H Liver panel: ALT too high to read, ALP>993, GGT 94 H ALT 5 x dilution: 2648 H EPOC: BUN 72 H, Creat 1.82 H Lepto witness test: negative

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. 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 this age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. Pyelectasia was noted along with cortical mineralization. Occasional cortical cyst was noted. The right kidney measured 4.12 cm. The left kidney measured 4.52 cm.

**Adrenal Glands**

The **adrenal glands** were not visualized.

**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 uniformly swollen with minor, excessive gallbladder debris that is largely mobile. The gallbladder measured 5.0 x 3.0 cm. This is consistent with emerging mucocele. The liver presented coarse architecture with mildly increased portal markings and subtle, mixed echogenic changes. An occasional, hyperechoic, non-disruptive nodule is noted. This is consistent with vacuolar hepatopathy



<b>PATIENT</b>	and some level of remodeling and history of inflammatory component. There was no overt suspicion of neoplasia. The common bile duct was dilated with excessive mucous debris and measured 0.6 cm.
Pompom Cortez	
<b>SPECIES</b>	<b>Gastrointestinal</b>
Canine	Examination of the <b>gastrointestinal tract</b> revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.
<b>BREED</b>	
Pomeranian	
<b>SEX</b>	<b>Pancreas</b>
Neutered male	The right and left limb of the <b>pancreas</b> was heterogenous and mildly irregular. The left limb measured up to 2.0 cm.
<b>AGE</b>	
14 years	<b>Free Abdomen</b>
<b>WEIGHT</b>	Minor enhanced mesentery was noted.
5.1 kg	<b>ULTRASONOGRAPHIC FINDINGS</b>
<b>INTERPRETED BY</b>	Mucoduct and emerging gallbladder mucocele.
Eric Lindquist, DMV DABVP, Cert. IVUSS	Chronic active pancreatitis presentation.
	Vacuolar hepatopathy liver pattern with remodeling.
<b>IMAGING PERFORMED BY</b>	<b>INTERPRETATION OF THE FINDINGS &amp; FURTHER RECOMMENDATIONS</b>
Erin Wicks	I cannot rule out that the common bile duct density may represent an early common bile duct mass. However, it is most consistent with mucoduct. Combination of chronic active pancreatitis and moderate degenerative renal changes as well as acute on chronic inflammatory hepatopathy are all issues in this patient. Justification of cholecystectomy and common bile duct lavage and liver biopsy could be considered. Medical management could also be considered with reassessment of the clinical status. Ursodiol therapy, Ampicillin, Metronidazole, fluid therapy and pain management is all indicated along with Leptospirosis titers. A recheck sonogram is recommended in 48 hours. Otherwise, surgical intervention would be indicated.
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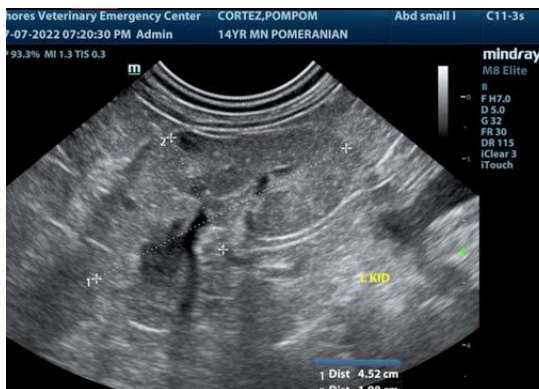
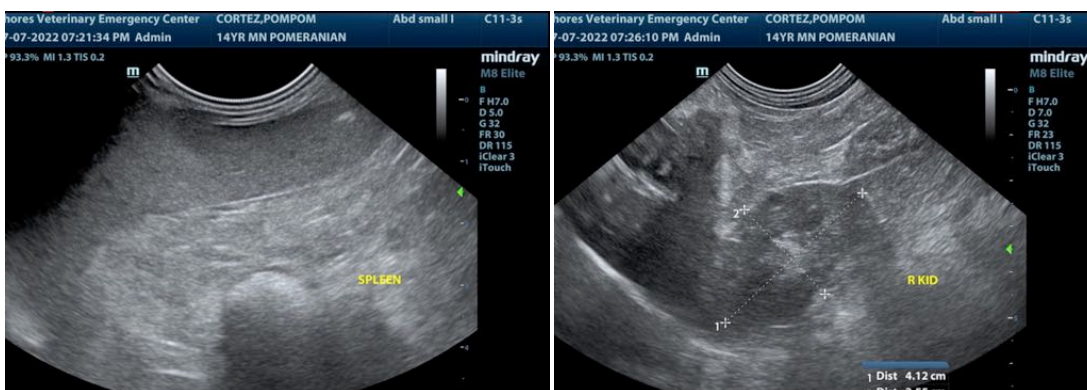
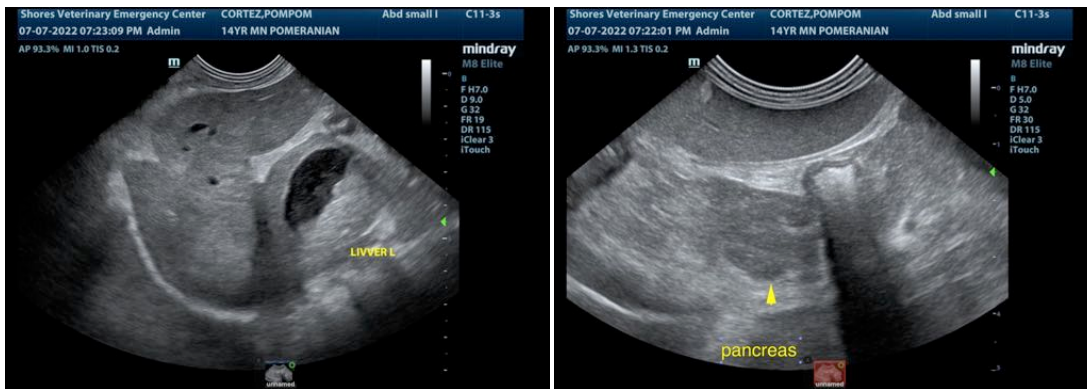
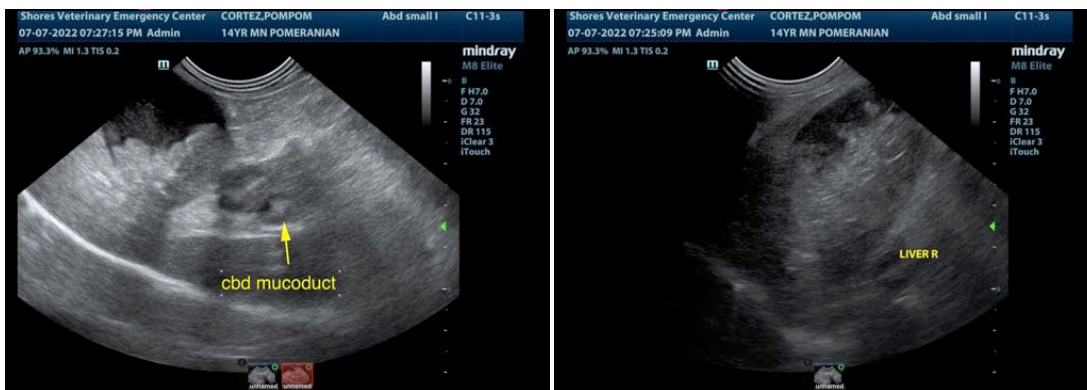
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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