



PATIENT

Shadow Tirpak

SPECIES

Canine

BREED

Havanese

SEX

Spayed Female

AGE

10 Years

WEIGHT

8.6 kg

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

Westwood Regional

REFERRING VET

Dr. Murphy

INVOICE

24712

DATE

8/16/21

PRESENTING CLINICAL SIGNS

Fever, lethargy, elevated liver values, history of Cushing's. Current meds: Vetoryl 10 mgs BID, Ursodial 1 1/4 tab SID, in-hospital tx: Cerenia, Famotadine, Unasyn, and IVFs, Abnormal PE/Chem/CBC/UA Results: Chem: BUN 3, creat. 0.4, ALP 536, ALT did not read, T. bili 2.0.

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 were 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 right kidney measured 5.75 cm. The left kidney measured 4.56 cm.

Adrenal Glands

The **adrenal glands** appeared slightly enlarged and swollen, expected for PDH. The right adrenal gland measured 2.13 cm x 0.83 cm at the caudal pole and 0.82 cm at the cranial pole. The left adrenal gland measured 2.46 cm x 1.1 cm at the caudal pole and 0.79 cm at the cranial pole.

Spleen

The **spleen** was largely smooth with subtle heterogeneous parenchymal changes while maintaining normal echogenic relationship to the liver and kidney. These changes are consistent with normal age-related alteration. The capsule was smooth without noticeable impingement from within the spleen or from pathology in the adjacent abdomen. The splenic vasculature demonstrated normal volume without signs of congestion or significant contraction. No evidence of active acute or chronic inflammatory, neoplastic, or infarctual changes were noted.

Liver

The **liver** presented increased portal markings and mild to moderate parenchymal remodeling. The gallbladder wall was edematous with localized free fluid and striating bile. The common bile duct was mildly thickened. The portal vein was dilated and congested, potentially owing to emerging portal hypertension. The cranial aspect of the gallbladder presented deformed, irregular wall with regional inflammation.

Gastrointestinal

The **gastrointestinal tract** was structurally unremarkable with normal curvilinear patterns. However, some reactive mesentery was noted.

Pancreas

The **pancreas** presented minor heterogeneous changes. Some pancreatic edema was evident.



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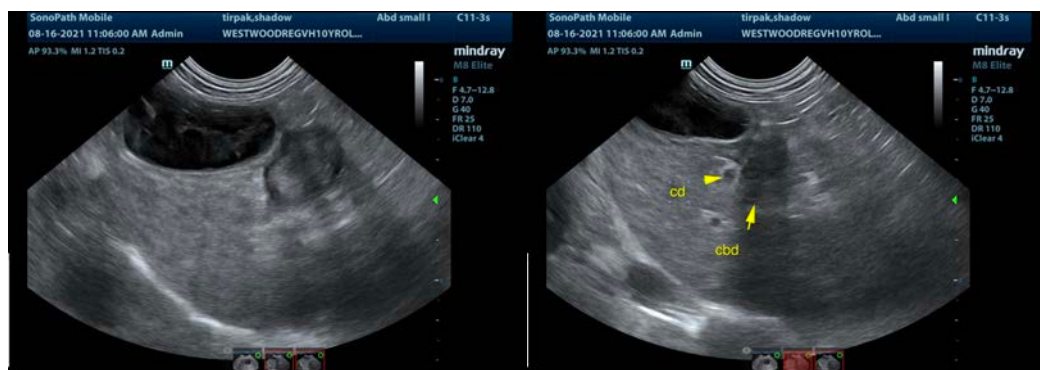
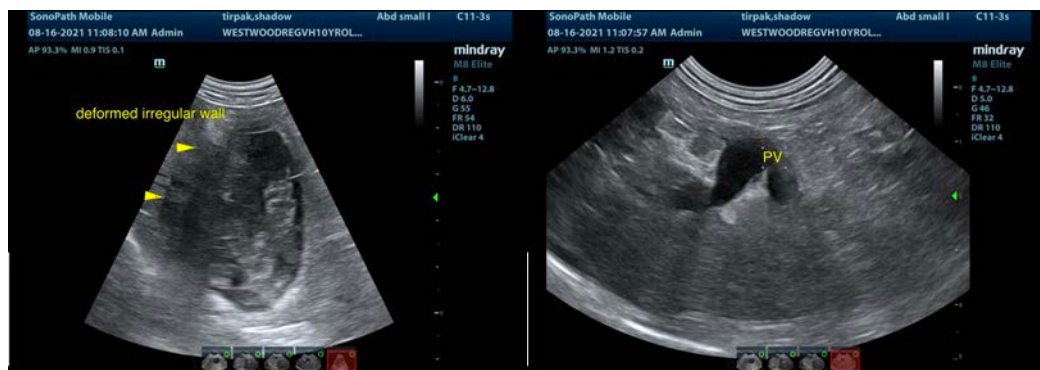
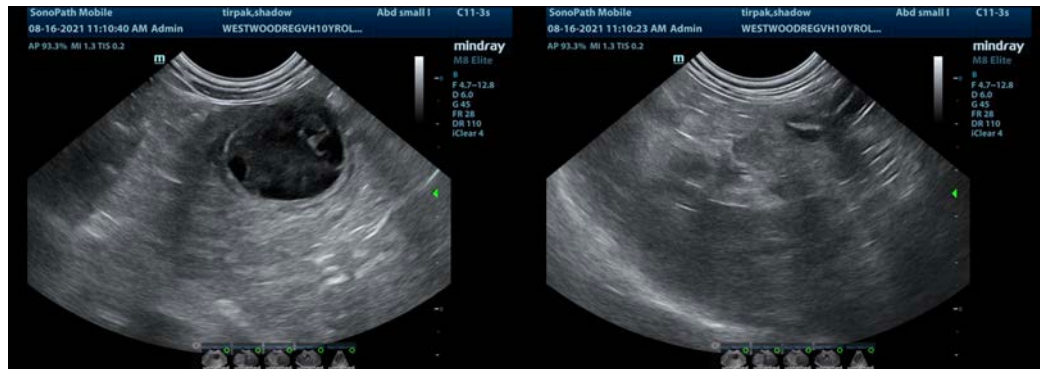
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ULTRASONOGRAPHIC FINDINGS

- Bilateral adrenal hypertrophy – consistent with PDH
- Cholangitis/cholangiohepatitis with atypical gallbladder mucocele
- Minor heterogeneous pancreas

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The gallbladder, even though not significantly large, does have all aspect of gallbladder mucocele, and the localized fluid and gallbladder edema is concerning. I recommend cholecystectomy, common bile duct lavage and liver biopsy in this patient. Given the gallbladder presentation and deformed cranial wall and edematous contour, there is a strong potential for early bile peritonitis. Medical therapy could be attempted, however I do not recommend this, as this may represent a ruptured or leaking gallbladder mucocele, which would explain its atypical presentation, as it may have lost some of its volume into the local intrahepatic space.





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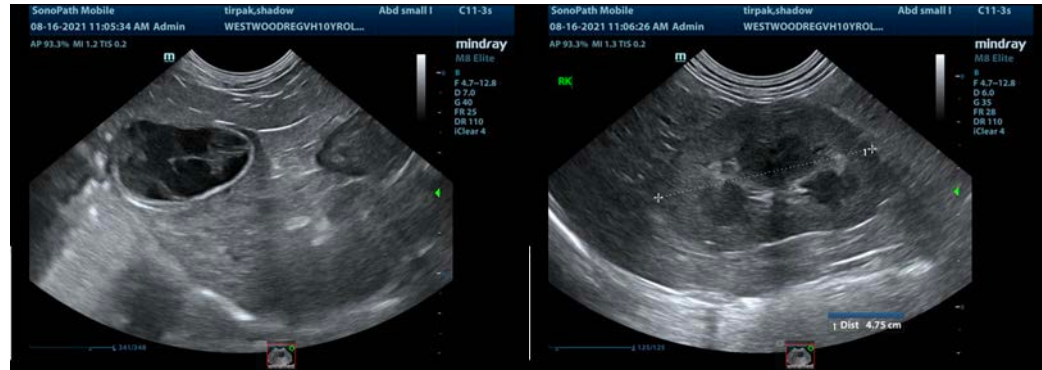
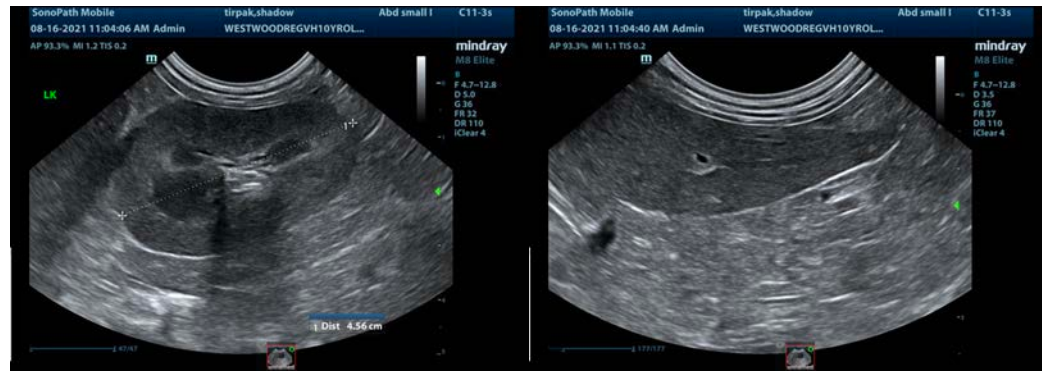
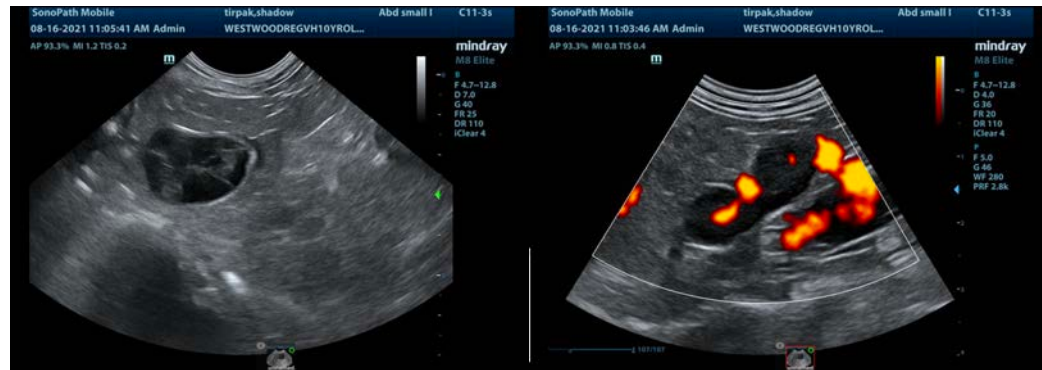
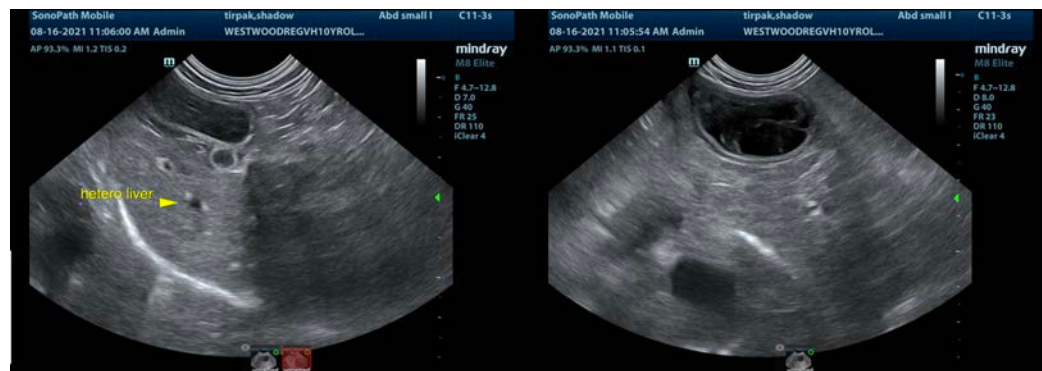
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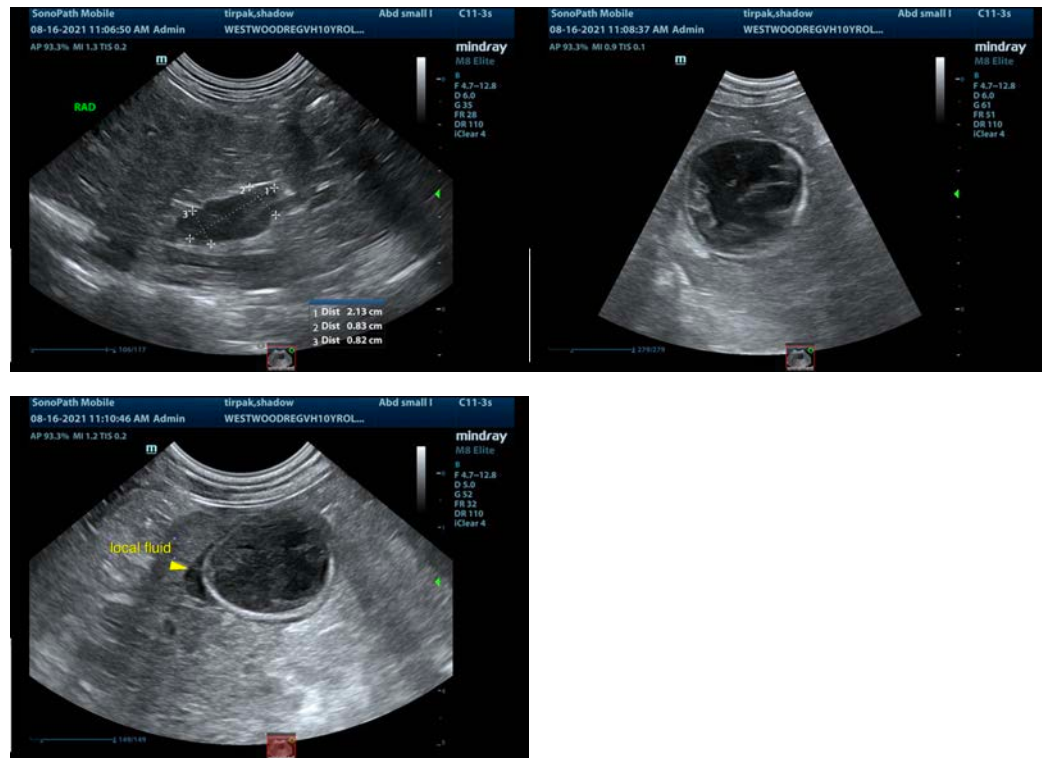
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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
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