

## PATIENT

Zeus Theoborobeakos

## SPECIES

Canine

## BREED

Pomeranian

## SEX

Intact Male

## AGE

12 years

## WEIGHT

7.14 lbs

## INTERPRETED BY

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

## IMAGING PERFORMED BY

Denise Bruno, LVT,  
RDMS

## HOSPITAL NAME

Farview AC

## REFERRING VET

Dr. Mosaad

## INVOICE

39469

## DATE

9/19/22

## RESENTING CLINICAL SIGNS

History: Enlarged Liver, (H) ALT Labs and Radiographs attached.

## 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 **prostate** was uniformly enlarged with lobar swelling appeared to impinge upon the urethra and mildly deviate the descending colon. The prostatic tissue was hyperechoic containing focal areas of decreased echogenicity. These changes are suggestive of either chronic inflammatory episodes, benign cystic pathology or both. Underlying neoplasia cannot be completely ruled-out but is lower on the differential list. This presentation is most consistent with benign prostatic hyperplasia with possible active prostatitis. Neutering or off-label Finasteride (Propecia) (0.1-0.5 mg/kg Sid) treatment is indicated +/- FNA or prostatic wash cytology and culture. The prostate measured 2.54 cm.

The testicles were imaged and uniform measuring 1.8 cm on the right with a hypoechoic nodule at the cranial pole measuring 0.4 cm.

The **kidneys** revealed normal size and structure, corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex and no evidence of pelvic dilation was present. The capsules were acceptably uniform without significant irregularities. The left kidney measured 3.43 cm with slight pinpoint mineralization.

### Adrenal Glands

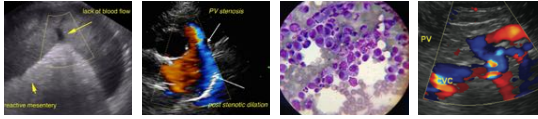
Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The right adrenal gland measured 1.29 x 0.51 cm at the caudal pole and 0.32 cm at the cranial pole. The left adrenal gland measured 1.25 x 0.49 cm at the caudal pole and 0.45 cm at the cranial 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 uniformly swollen with heterogenous, ill-defined, hyperechoic nodular change and hypoechoic nodules that measured up to 0.87 cm. The liver presented coarse architecture with mildly



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increased portal markings and subtle, mixed echogenic changes. Occasional, hypoechoic nodule was noted and measured 0.8 cm. Minor, excessive gallbladder debris and over distension with dependent and suspended bile without evidence of overt mucocele formation. However, excessive sludge was present. This is consistent with vacuolar hepatopathy and some level of remodeling and history of inflammatory component. There was no overt suspicion of neoplasia.

**Gastrointestinal**

Examination of the **gastrointestinal tract** 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.

**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.

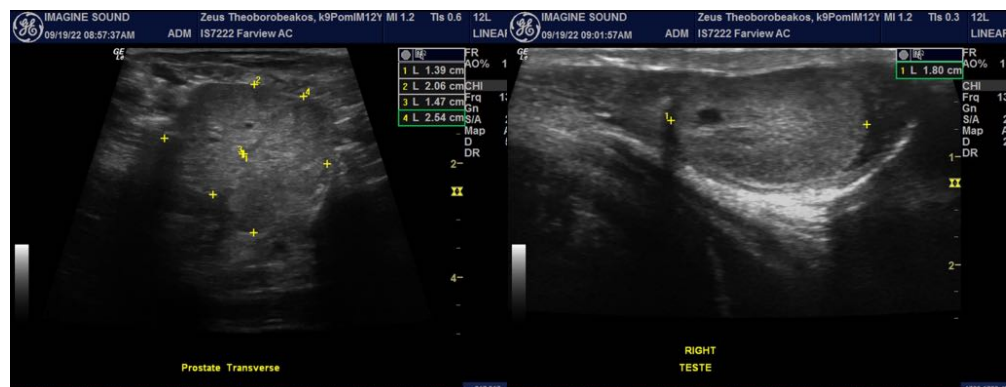
**ULTRASONOGRAPHIC FINDINGS**

Non-specific vacuolar hepatopathy nodular hyperplasia liver pattern.

BPH prostate.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

FNA of the general parenchyma and nodules is warranted. There is a minor potential for abscessation. Nodular hyperplasia is likely, neoplasia is unlikely. There was no significant evidence or suspicion of neoplasia.





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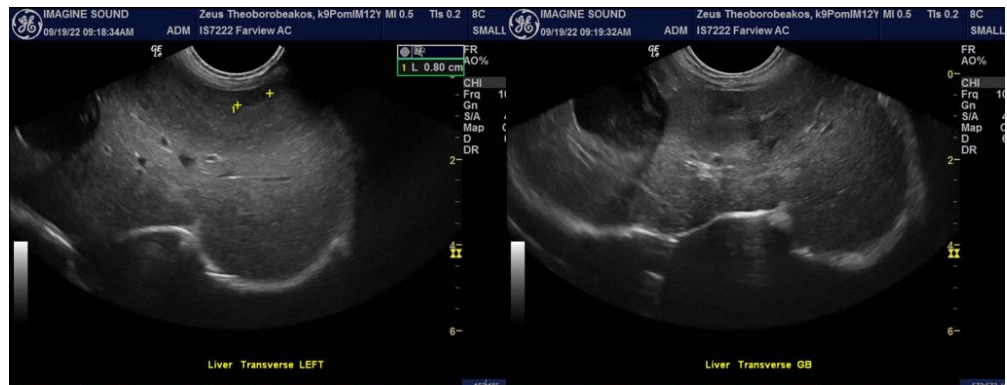
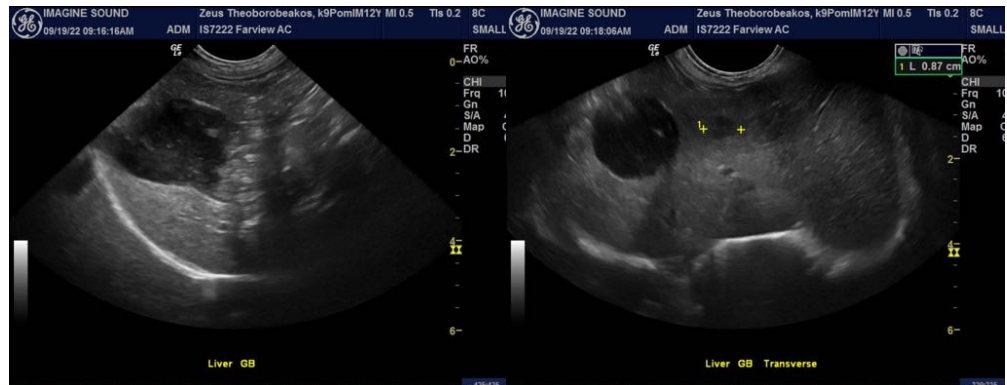
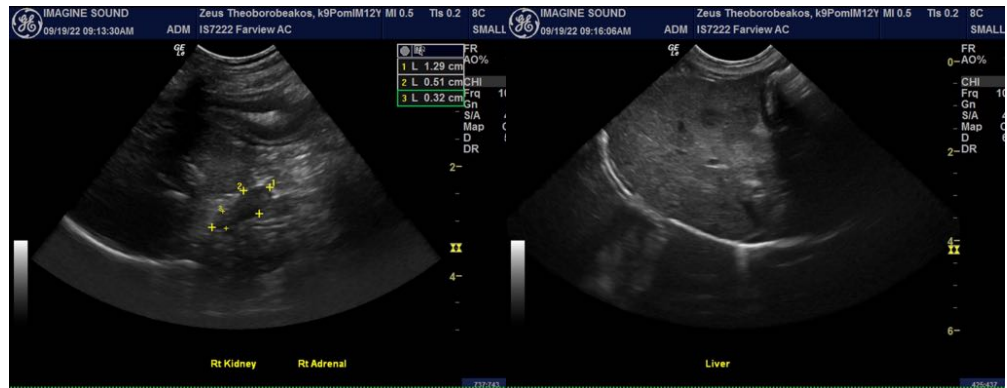
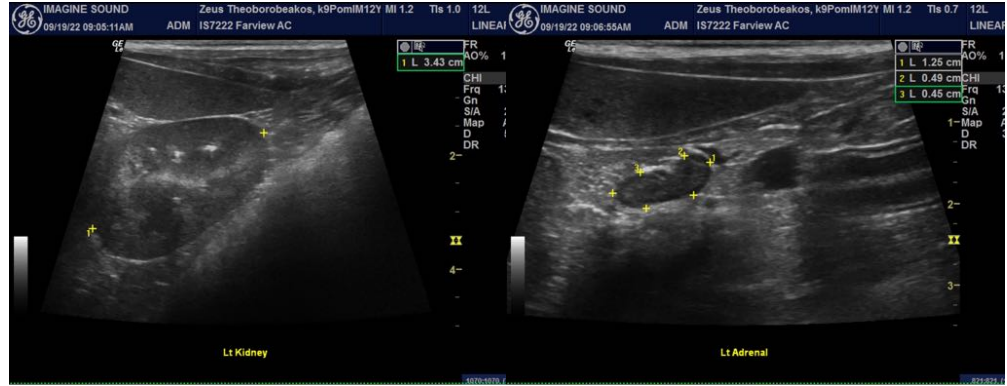
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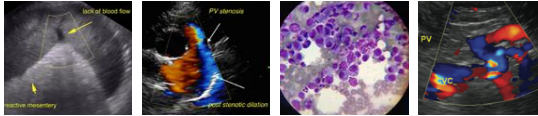
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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  
Eric.Lindquist@SonoPath.com

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