

**PATIENT**

Linus Cerf

**PRESENTING CLINICAL SIGNS**

History: Polydipsia  
Abnormal PE/Chem/CBC/UA Results: ALT 128 AST 58 ALP 1333 GGT 33

**SPECIES**

Canine

**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. A minor amount of sand was noted in the bladder with a grouping of which measured 0.5 cm. No evidence of inflammatory or neoplastic changes was noted. Ureteral papillae were normal.

**BREED**

Dachshund

**SEX**

Neutered male

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. Mineralization was noted in the kidneys. The right kidney measured 4.4 cm.

**AGE**

14 years

**WEIGHT**

16.5 lbs

**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 2.09 x 0.6 cm. The right adrenal gland measured 2.24 x 0.6 cm at the cranial pole and 0.54 cm at the caudal pole.

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Cerf

**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.

**HOSPITAL NAME**

Veterinary Center of  
Hardyston

**Liver**

The **liver** was uniformly swollen. The liver presented coarse architecture with mildly increased portal markings and subtle, mixed echogenic changes. This is consistent with vacuolar hepatopathy and some level of remodeling and history of inflammatory component. There was no overt suspicion of neoplasia. Gallbladder calculus was noted and measured 0.82 cm. Excessive gallbladder debris coalesced at the apex of the gallbladder.

**REFERRING VET**

Dr. Cerf

**INVOICE**

47923

**DATE**

6/22/23



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**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**

Diffuse hyperechoic changes were present in the area of the **pancreas**. The pancreatic remodeling was evident with multifocal to diffuse hyperechoic changes. These changes are consistent with fibrosis, amyloid, saponification of fat and may contain areas of low-grade chronic active inflammation especially if pain on imaging (+ Murphy sign) was present +/- focal subxyphoid palpation reveals pain response. No overt masses were noted.

**ULTRASONOGRAPHIC FINDINGS**

Gallbladder sludge, yet not to the level of mucocele formation

Minor gallbladder calculus.

Benign hepatopathy.

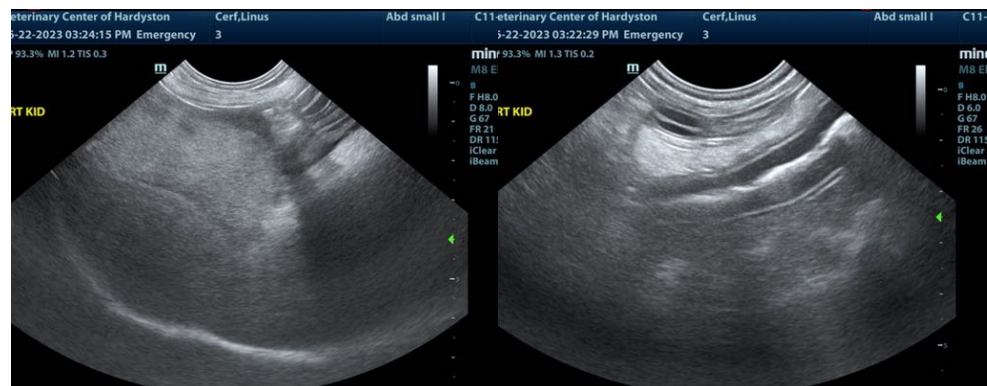
Non-obstructive bladder sand.

Pinpoint nephrolithiasis.

Pancreatic fibrosis.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The patient may be having lower urinary tract signs owing to the bladder sand. The gallbladder appears to be consistent with emerging mucocele. Gallbladder motility study or trial of Ursodiol is recommended over 6-8 weeks is indicated. Otherwise, structurally unremarkable abdomen.





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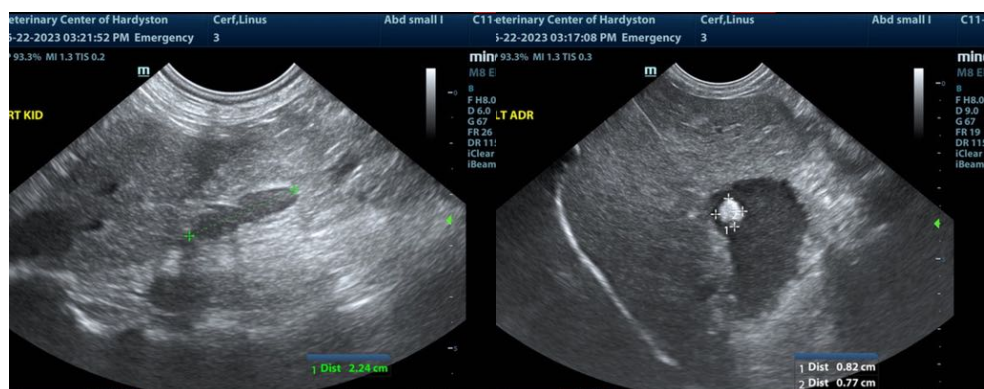
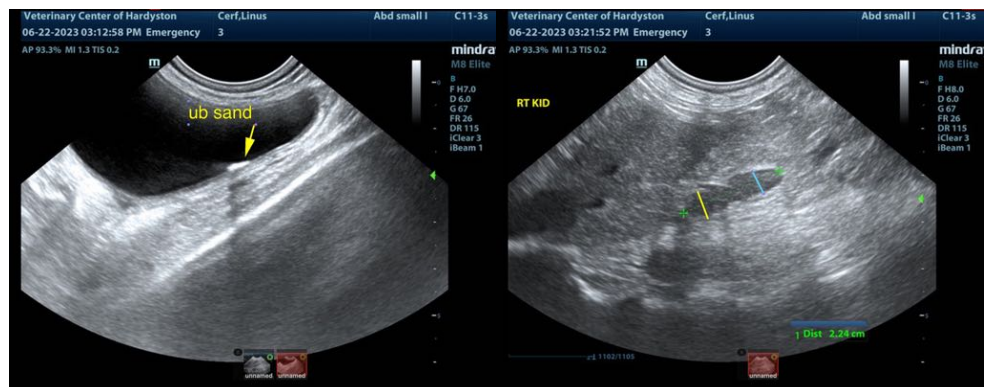
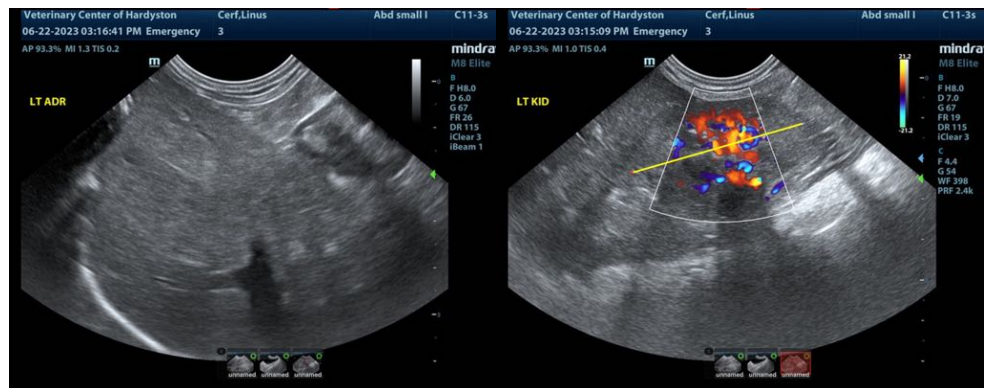
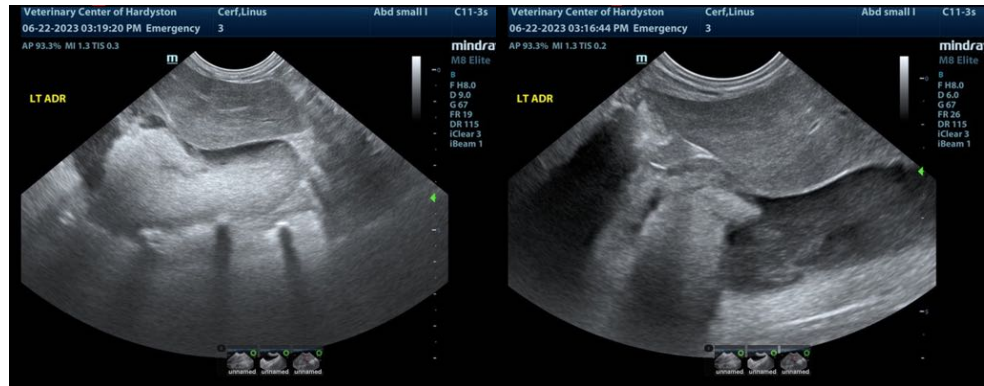
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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