



## PATIENT

Bella Dover

## SPECIES

Canine

## BREED

Schnauzer

## SEX

Spayed Female

## AGE

8 Years

## WEIGHT

19 Pounds

## INTERPRETED BY

Eric Lindquist, DMV,  
DABVP (CFM), Cert.  
IVUSS

## IMAGING PERFORMED BY

Wasserman, DVM

## HOSPITAL NAME

Highlands AH

## REFERRING VET

Dr. Frankenberger

## INVOICE

37036

## DATE

5/9/26

## PRESENTING CLINICAL SIGNS

History: Pet had a great appetite now waxes/wanes for 2-3 months. No coughing, sneezing, diarrhea or vomiting. No pupd. Grade 2/4 dental disease with moderate halitosis. Prev hx bladder stones.. No current medications. Sedated with 0.05ml dexdomitor 0.5mg/ml combined with 0.1ml butorphanol 10mg/ml IV for sonogram. Adequate but patient still slightly tense.

Abnormal PE/Chem/CBC/UA Results: CBC normal. Panel normal. UA hematuria and pyuria without bacteria. 4dx HWT negative. Spec cPL normal 49 (0-200). Total T4 1.9 (1.0-4.0)

## 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 pelvic urethra was imaged 2.0 cm beyond the cystourethral junction.

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 right kidney measured 4.56 cm. The left kidney measured 4.56 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 right adrenal gland measured 0.69 cm at the cranial pole and 0.35 cm at the caudal pole. The left adrenal gland measured 0.52 cm at the caudal pole and 0.38 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 were noted.

### Liver

The **liver** images submitted revealed subjectively normal liver size, contour, and structure. Parenchymal echogenicity was naturally coarse and hypoechoic to the spleen. Vascular and biliary tracts were of normal volume with no evidence of congestion.

The **gallbladder** was mildly over distended with suspended and dependent debris, yet not to the level of emerging mucocele, yet sludge appears to be mildly excessive. No adjunctive inflammation was noted.



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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***

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**

- Excessive gallbladder coalesced bile and mild overdistention, consistent with emerging mucocele.
- Structurally normal urinary tract- no evidence of gross pathology.

## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The gallbladder is not likely an overt clinical issue. Gallbladder motility study would be ideal. Ursodiol therapy over a 6-8 week period and recheck sonogram would be ideal. No overt cause of the hyporexia, however, the gallbladder may be playing a minor role. Concurrent UTI may be playing a role. Other causes of poor appetite, such as orthopedic pain, CNS or thoracic disease should all be considered.

## **Gall Bladder Motility Study**

Preparation:

- Fast the dog for 12 hours before the test to ensure gallbladder is full.
- Obtain baseline ultrasonographic long axis measurements of gallbladder size in SDEP 11 & SDEP 12 positions. Long axis apex to neck, short axis at widest point.



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EXAMPLE IMAGE ONLY.

Meal Administration

- Feed a high-fat test meal A/D diet (Hills) (*High Fat/ High Protein*)

Post-Prandial Imaging

- Perform repeat ultrasound prior to feeding (Time 0) and then at 15 & 30 minutes post-meal.
- Re-measure gallbladder volume and assess for contraction.

No change or enlargement: Possible stasis, dyskinesia, mucocele risk, or obstruction.

SonoPath is currently conducting a study for publication on this subject and contributions of image sets following this protocol are appreciated. [Info@sonopath.com](mailto:Info@sonopath.com) for more information.

## Chronic UTI Protocol

I recommend **Enrofloxacin** (5-10 mg/kg SID PO) (In patients > 1 year of age) in late pm after urination to maximize urinary concentrations overnight. This assumes that culture supports this use. Repeat **culture** at 3-4 weeks and continue treatment at least 7-10 days post negative urinary sediment and negative culture. *Note: Negative culture does not necessarily mean lack of UTI.* Other favorite antibiotics for chronic UTI include third generation Cefa (Ceftiafur or similar s.i.d. injectable) or Clavamox. If suspicion of occult urinary incontinence is present then **phenylpropanolamine (PPA)** (1-2 mg/kg BID) can be employed long term to enhance urethral tone.



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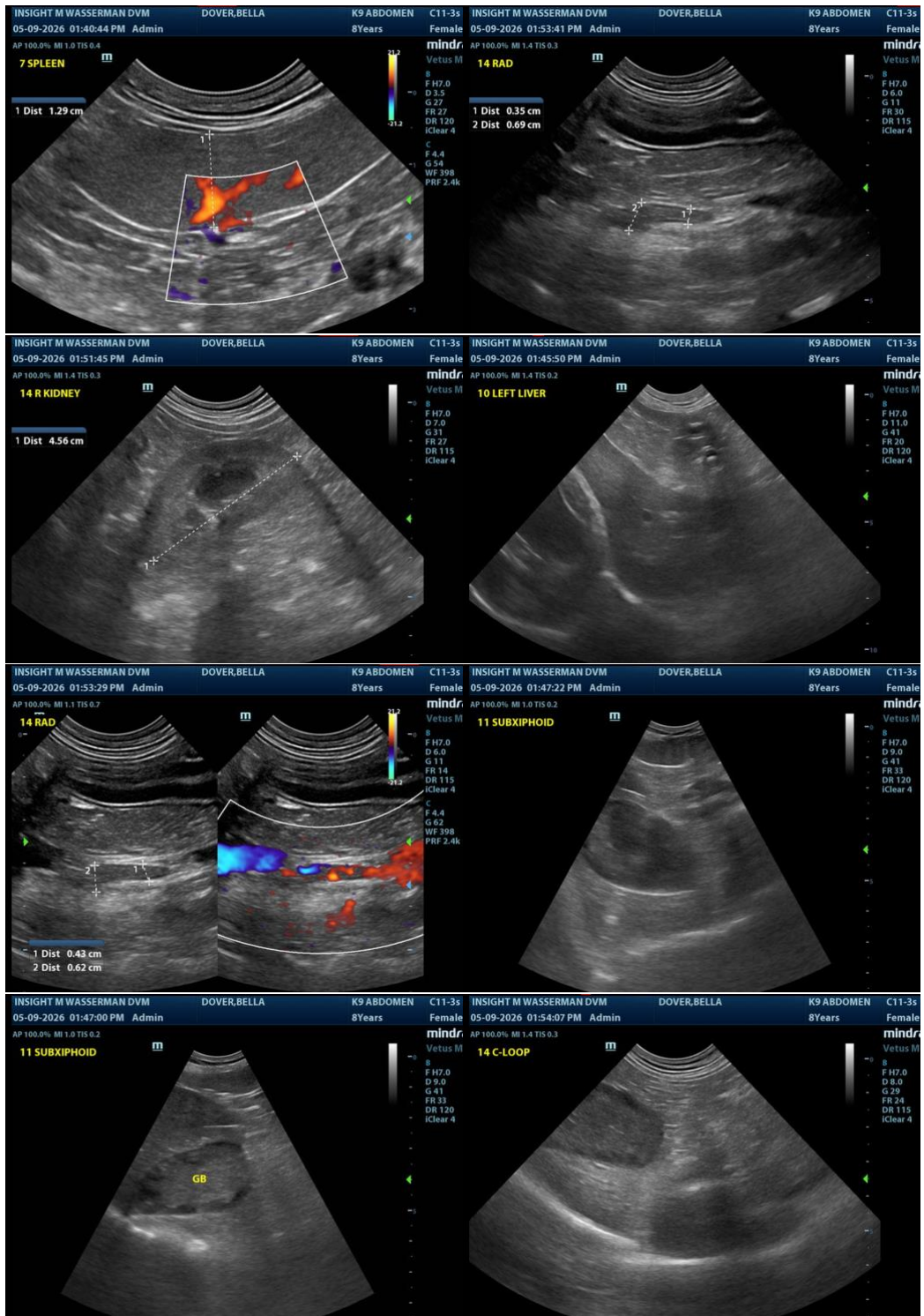
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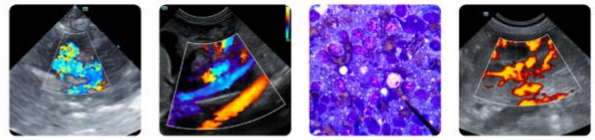
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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(CFM), Cert. IVUSS,  
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