



DATE PRESENTING CLINICAL SIGNS

3/3/26 **Patient History:** Recurrent UTI; painful caudal abdomen.

PATIENT Current Medications: Marboquin 100mg SID.

Lea Dvorak **Labwork Results:** Labwork attached.
Date of Previous IntraPet Ultrasound: 9/2025. See attached.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

SPECIES Imaging Performed by: Stephanie Warga RDCS, RVT.

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

BREED Urinary System

Hound x The **urinary bladder** presented minor apical wall thickening with echogenic remodeling, consistent with mucosal fibrosis owing to chronic UTI and muscularis hypertrophy. Wall thickness measured 06.0 cm in the apex.

SEX

Spayed Female 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 noted in both kidneys, non-obstructive. Right kidney measured 5.9 cm. Left kidney measured 5.3 cm.

AGE

6/8/15

WEIGHT

60 lbs

INTERPRETED BY

Eric Lindquist, DMV,
DABVP, Cert. IVUSS

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. Left measured 2.5 cm x 0.66 cm at the caudal pole and 0.49 cm at the cranial pole. Right measured 2.36 cm x 0.44 cm at the caudal pole and 0.44 cm at the cranial pole.

HOSPITAL NAME

Chadwell Animal
Hospital

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.

REFERRING VET

Dr. Gold

Liver

INVOICE

73362

The **liver** images from right and left intercostal as well as subcostal views revealed subjectively normal liver size, contour, and structure. Some age-related parenchymal remodeling was noted but likely not clinically significant at this time. Vascular and biliary tracts were of normal volume and no evidence of congestion was noted. The gallbladder presented some dependent debris with essentially normal contour. The cystic and common bile ducts were normal. No overt evidence of active inflammatory, infiltrative or regenerative pathology was noted but should be paired with current or past LE elevations regarding any clinical significance to this presentation. The hepatic lymph nodes were unremarkable.

Gastrointestinal

The stomach revealed minor fluid accumulation within the gastric lumen yet no evidence of obstruction. The small intestines and colon were unremarkable with normal curvilinear mural patterns and content.

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

- Mild chronic cystitis and mucosal remodeling of the urinary bladder. No evidence of calculi or masses.
- Age related abdominal changes otherwise.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

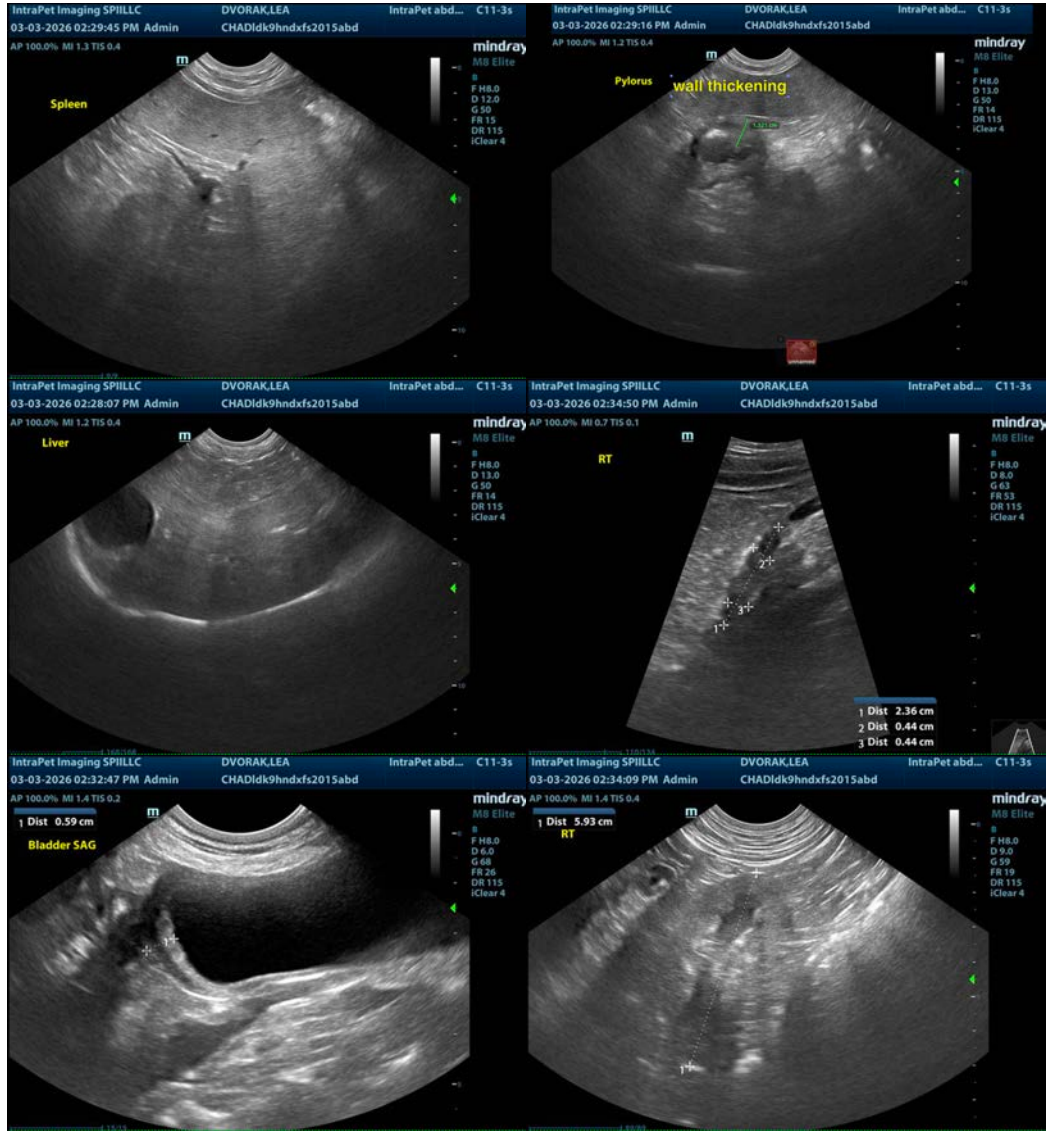
Examination of the vaginal vestibule for predisposing images is recommended.

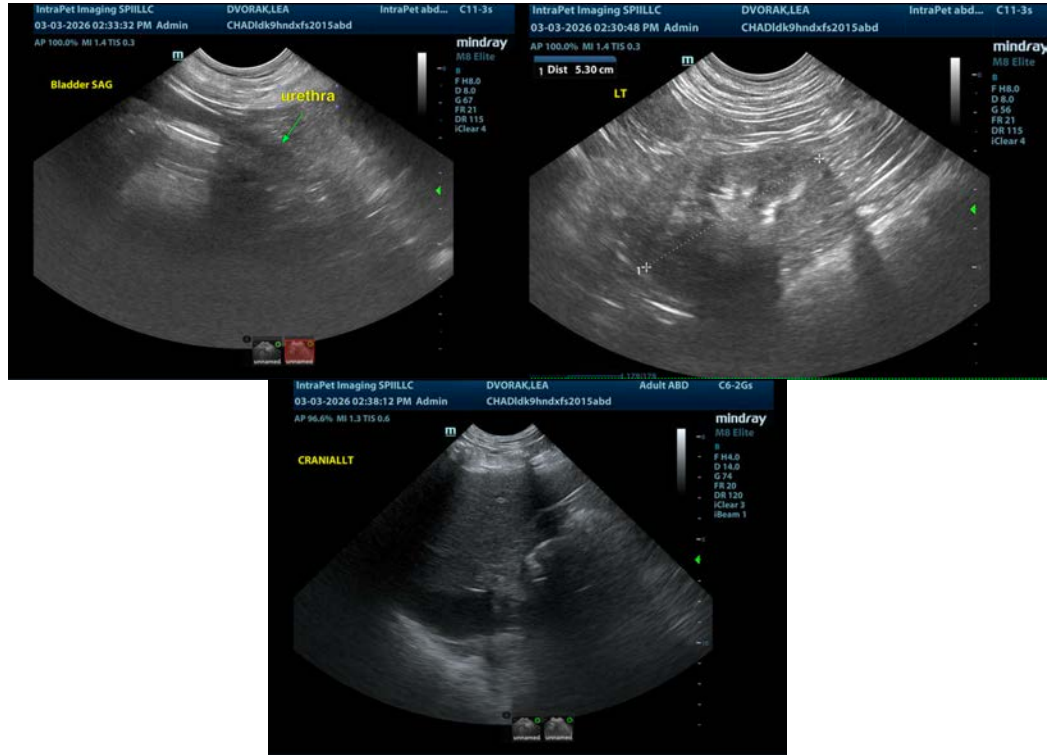
Below is to be utilized for UTI with chronic urinary tract changes found sonographically that may serve as nidus of infection and history of chronic or recurrent UTI is an issue.

I recommend Clavamox as a first level approach to chronic UTI at 12.5-25 mg/kg bid owing to optimal urinary concentrations. If bacterial resistance is an issue then **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 (Ceftiofur 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.

UTI Types
Guidelines for management of UTIs. *The Veterinary Journal* 247 (2019) 8-25

- **Sporadic Bacterial Cystitis** - simple, uncomplicated UTI, hematuria, pyuria, bacteria. Dogs and older cats primarily. Tx analgesic + Ab-clavamox or similar 3-5 days. No effect? Ensure no comorbidity or C/S result non compatible
- **Recurrent Bacterial Cystitis** - 3+ episodes within 12 months. Look for underlying cause. Incontinence, recessed vulva/pyoderma, prostatitis, calculi, neoplasia, resistant bacteria. Analgesia, and culture and refine AB Tx up to 14 days. Culture 5-7 days after stopping Tx.
- **Upper UTI** - Pyelonephritis, ascending or embolic. Comorbidity check for diabetes, cushings, lithiasis, prostatitis, neoplasia. Fever, Lethargy, PU/PD, painful kidney on clinical exam. Tx Fluoroquinolone (Marbo/enro not cipro) or Cefa (Naxcel injectable in larger dogs), C/S, tx up to 4-6 weeks (debate). Culture 1-2 weeks after stopping AB.
- **Subclinical Bacteruria** - Commensalism, treatment debatable and variable depending on scan.
- **EL recs** - scan, evaluate, Tx AB 5-7 days negative sediment + negative culture. Clavamox, Cefa, Quinolone





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.

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