**DATE PRESENTING CLINICAL SIGNS**

Penelope Jordan is a 1 yr intact female Clumber Spaniel. I saw her on 8/26/2022 for the first time for a UTI (cultured as E. coli susceptible to all antibiotics). She was placed on Clavamox BID while awaiting results of the culture and this antibiotic was continued when results were obtained. She has a moderate to severely recessed vulva. Looking through her history, this is Penelope's THIRD UTI since 1/31/2022.

**PATIENT**

Penelope Jordan

-first UTI at ER 1/31/2022 placed on Clavamox, change to Enrofloxacin X 10 days, after culture results Proteus mirabilis -second UTI at a different ER 5/14/2022, no culture performed, cocci on U/A, SMZ/TMP BID X 10 days

**SPECIES**

Canine

Current Medications: None at this time.

Lab Results: CBC/Chem10/SDMA/Lytes: wnl. UA: SP GRAVITY 1.059

PH 8.5, PROTEIN 2+, WBC UAM 0-2 HPF 0 - 5, RBC UAM 0-2 HPF

BACTERIA NONE SEEN, EPI CELL 1+ (1-2)/HPF, OCCASIONAL AMMONIUM MG PHOSPHATE (0-1)/HPF, U PRO/CREA 0.1

**BREED**

Clumber Spaniel

in-house urine culture: negative

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

**SEX**

Intact female

**AGE**

9/1/21

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System**

The **urinary bladder** presented a relatively uniform thickening of the cranioventral and craniodorsal mucosae with micropolypoid mucosal changes without involvement of the submucosae. The urine presented some echogenicity consistent with suspended debris. No evidence of urethral pathology was present. This presentation is most consistent with chronic cystitis. The bladder measured up to 0.34 cm at mild repletion. No evidence of ectopic ureter.

The uterus measured 0.5 cm and was empty.

**WEIGHT**

62.2 lbs

**INTERPRETED BY**Eric Lindquist, DMV  
DABVP, Cert. IVUSS

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. The capsules were acceptably uniform without significant irregularities. The right kidney revealed slight pyelectasia. This is likely related to pyelonephritis. Echogenic debris was noted in the pelvis, this is suggestive for infection.

**HOSPITAL NAME**

Frederick Road VH

**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 2.03 x 0.52 cm at the caudal pole and 0.55 cm at the cranial pole. The right adrenal gland measured 2.17 x 0.65 cm at the cranial pole and 0.54 cm at the caudal pole.

**REFERRING VET**

Dr. Beyer

**INVOICE**

39940

**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** 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 presented acceptably thin walls with primarily anechoic content. The cystic and common bile ducts were normal. No pathological hepatic lymphadenopathy was evident. No overt structural evidence of inflammatory, infiltrative or regenerative pathology was evident.

### **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.

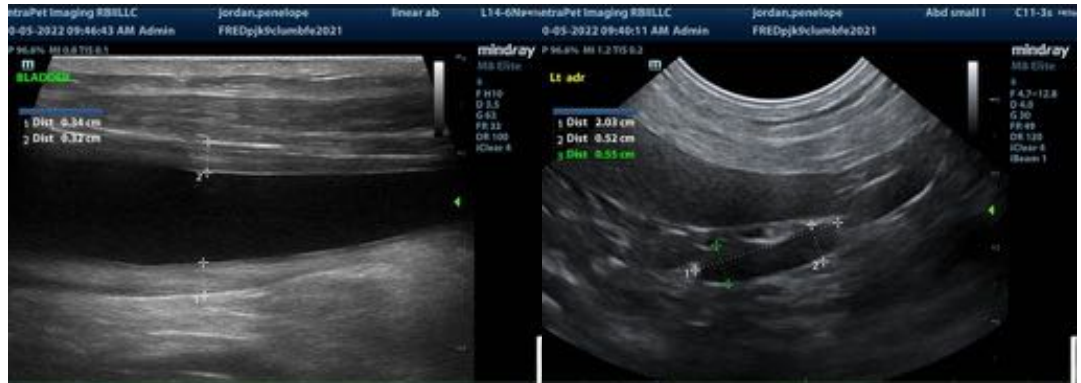
### **ULTRASONOGRAPHIC FINDINGS**

Chronic cystitis bladder pattern.  
Right renal pyelectasia.

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

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.





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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