

**DATE PRESENTING CLINICAL SIGNS**

8/12/22 Chronic UTI, Neg C&S, hematuria. Palpable thickening of bladder neck.

PATIENT

Izzy Bouchelle

Current Medications: None listed.

Lab Results: RBC, WBC >50, struvites H/hpf, SG 1.024, pH 7.0.

Date of Previous IntraPet Ultrasound: 2/23/21. See attached.

Sedation: Torbugesic IV.

SPECIES

Canine

Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**BREED**

Labrador X

Urinary System

The **urinary bladder** and visible pelvic urethra were unremarkable for the level of repletion presented. The urine, however, did present some mildly echogenic debris consistent with mucous, exfoliated cells from renal or bladder origin, and/or blood clots as these echogenic changes can all present similarly. This is often related to urinary tract infection but may represent simple evidence of exfoliated debris or sterile inflammation. Cystocentesis, urinalysis, +/- culture would be recommended to rule out and define any UTI. This is a moderate change.

SEX

Spayed Female

AGE

10/16/14

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some minor 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. Slight mineralizations were noted. The right kidney measured 6.47 cm. The left kidney measured 6.54 cm.

WEIGHT

69 Pounds

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. The right adrenal gland measured 2.64 cm x 0.52 cm at the caudal pole and 0.59 cm at the cranial pole. The left adrenal gland measured 2.83 cm x 0.62 cm at the caudal pole and 0.39 cm at the cranial pole.

IMAGING PERFORMED BY

Stephanie Warga
RDCS, RVT

Spleen

The **spleen** revealed 2 separate iso- to slightly hyperechoic nodules, measuring 1.13 cm and 0.96 cm. The spleen otherwise presented generalized enlargement.

HOSPITAL NAME

North East AH

Liver

The **liver** images from right and left intercostal as well as subcostal views revealed subjectively normal liver size, contour, and structure. Some minor 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.

REFERRING VET

Dr. Hanlin

INVOICE

16846

Gastrointestinal

The **stomach** in this patient presented prominent mucosal folds and hypertrophied muscularis yet no loss of mural detail or ulcerative disease noted. The small intestine and colon were unremarkable.

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

- Urinary bladder debris
- Minor age-related renal changes with mineralization
- Mild splenomegaly with undefined splenic nodules- FNA is warranted
- Gastric hypertrophy, unremarkable GI tract otherwise
- Minor age-related hepatic changes

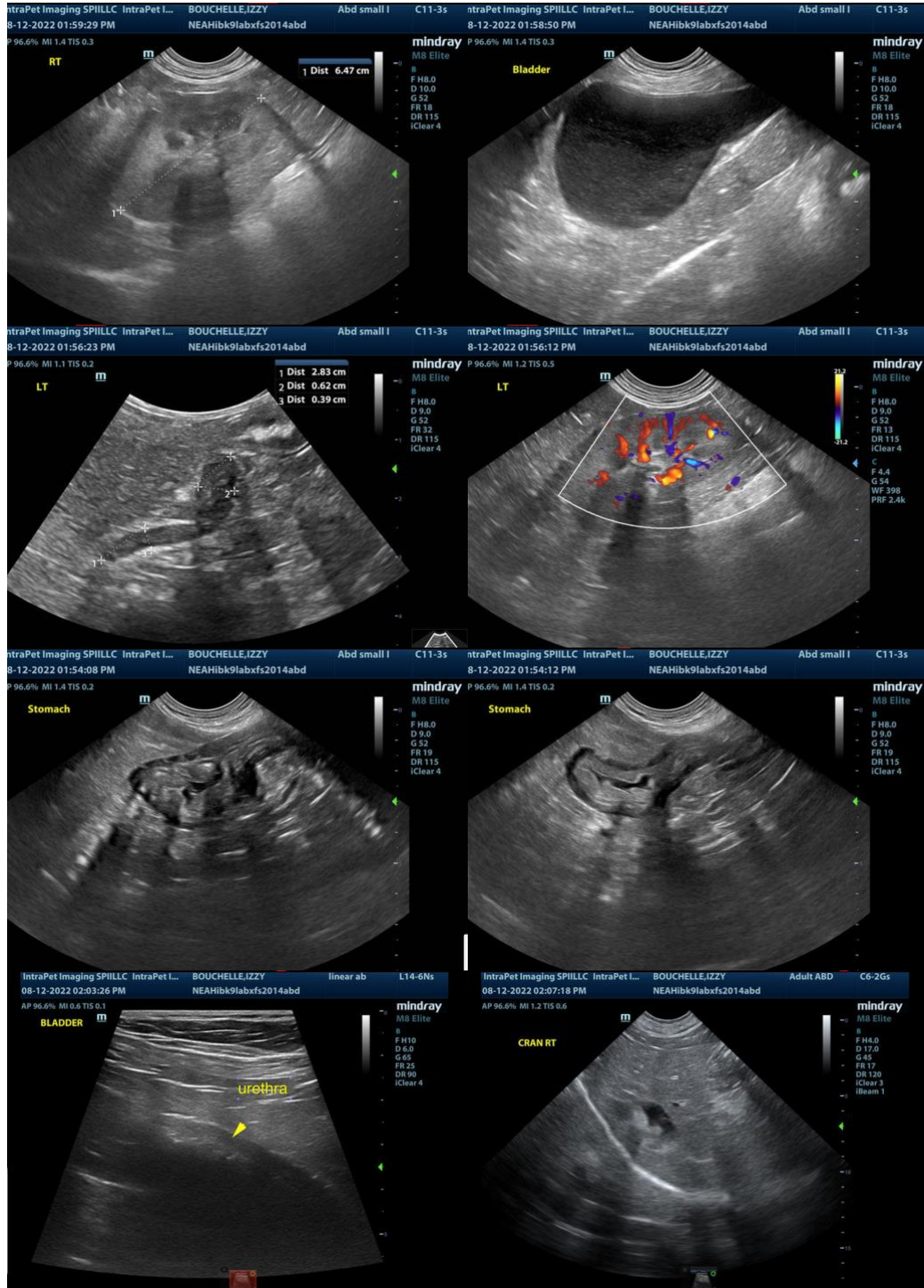
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of masses or calculi noted in the urinary tract. 4-6 weeks antibiotic treatment is warranted. Examination of vaginal vestibule for predisposing issues, such as recessed vulva and/or urine pooling in the vaginal vault.

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.





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