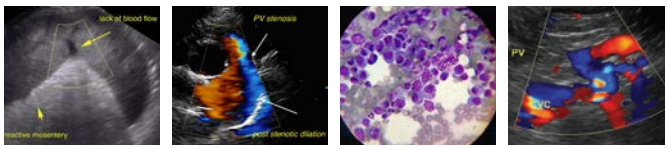
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com™
1-800-838-4268 info@sonopath.com

PATIENT
June Bug Norberg

SPECIES
Canine

BREED
Pug

SEX
Spayed Female

AGE
13.5 Years

WEIGHT
15.5

INTERPRETED BY
Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY
Dr. Christina Sitton

HOSPITAL NAME
Sherwood Family PC

REFERRING VET
Dr. Christina Sitton

INVOICE
46495

DATE
4/7/23

PRESENTING CLINICAL SIGNS

Lethargic, inappetant --> proceeded w/ AUS to rule out other possible pathologies chronic hx of UTI hx lesion localized to C1-5 myelopathy or intracranial unable to ambulate on own and wears diaper for incontinence.

Abnormal PE/Chem/CBC/UA Results: T4 0.5 ug/dL 1.0 - 4.0 Chemistry ALB 2.4 g/dL 2.7 - 3.9 A/G Ratio 0.6 0.7 - 1.5 ALKP 504 U/L 5 - 160 CBC WBC 21.7 K/uL 4.9 - 17.6 Neutrophils appear slightly toxic. Dohle bodies seen. ABS NEUTS 16926 /uL 2940 - 12670 ABS LYMPHS 217 /uL 1060 - 4950 ABS MONOS 1953 /uL 130 - 1150 ABS EOS 0 /uL 70 - 1490 ABS BASO 0 /uL 0 - 100 ABS NEUTB 2604 /uL 0 - 170 UA rods UC URINE CULT & SUSCEPT: SOURCE CYSTOCENTESIS Status: FINAL Isolate 1: E. coli - >100,000 CFU per ml

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

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. The pelvic urethra was imaged 3.0 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. The capsules were acceptably uniform without significant irregularities. The left kidney measured 4.0 cm. Slight pyelectasia noted in the right kidney with echogenic pelvic debris. The right kidney measured 4.3 cm. Ill-defined pelvic fat noted in both kidneys.

Adrenal Glands

The region of the **left adrenal gland** was visualized, no evident pathology.

The **right adrenal gland** was 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 0.42 cm at the cranial pole and 0.38 cm at the caudal pole.

Spleen

The **spleen** was folded upon itself caudally, uniform. No evidence of pathology.

Liver

The **liver** presented slight increased portal markings. Vascular and biliary tracts were of normal volume with no evidence of congestion. The gallbladder wall was mildly echogenic, no evidence of pathology. Minor gallbladder debris noted.

Gastrointestinal

The **gastric** wall presented hypertrophied mucosa and empty lumen. The small intestine and colon were mildly thickened.

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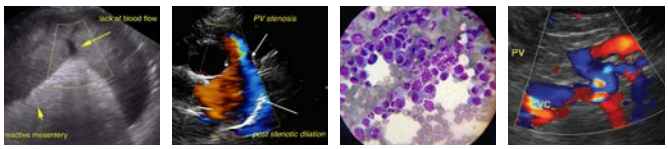

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Pancreas

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.

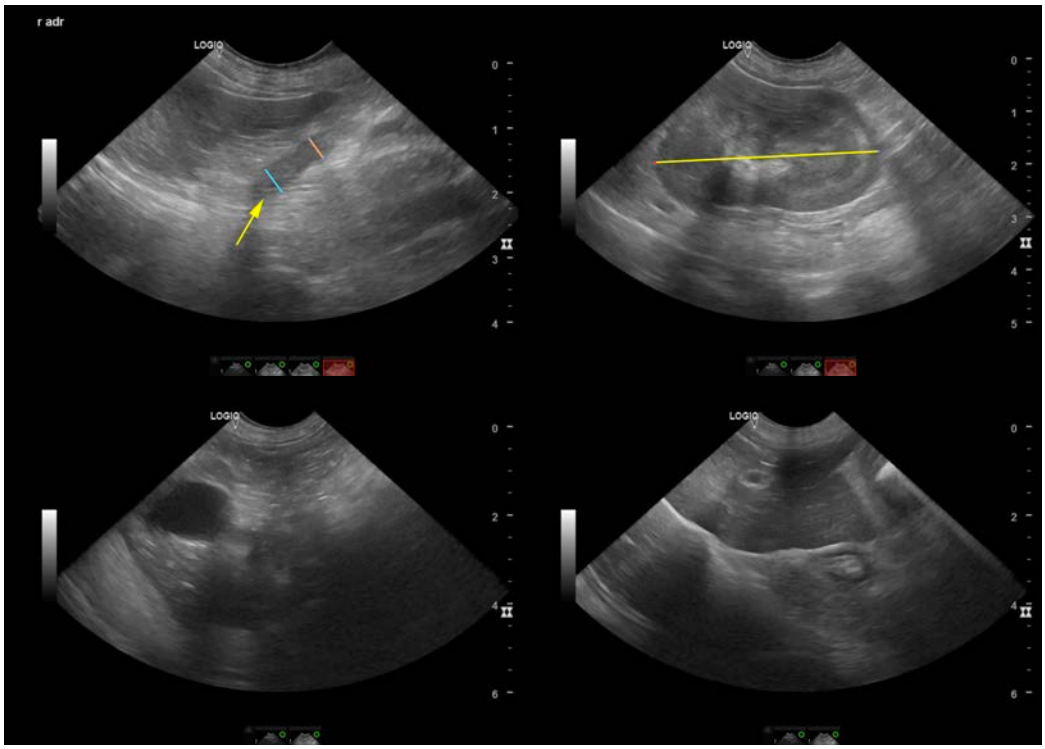
ULTRASONOGRAPHIC FINDINGS

- Pyelonephritis renal pattern with bladder debris
- Minor upper GI thickening
- Minor hepatic remodeling
- Folded spleen

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of significant disease. Treatment for chronic pyelonephritis warranted over the next 4-6 weeks. Pulse antibiotics may be necessary in this patient long-term. Examination of the vaginal vestibule warranted to assess for predisposing issues.

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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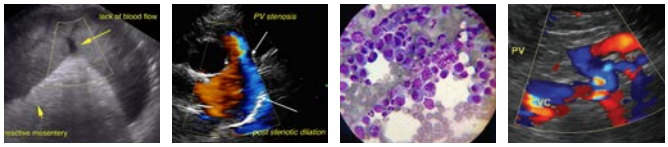

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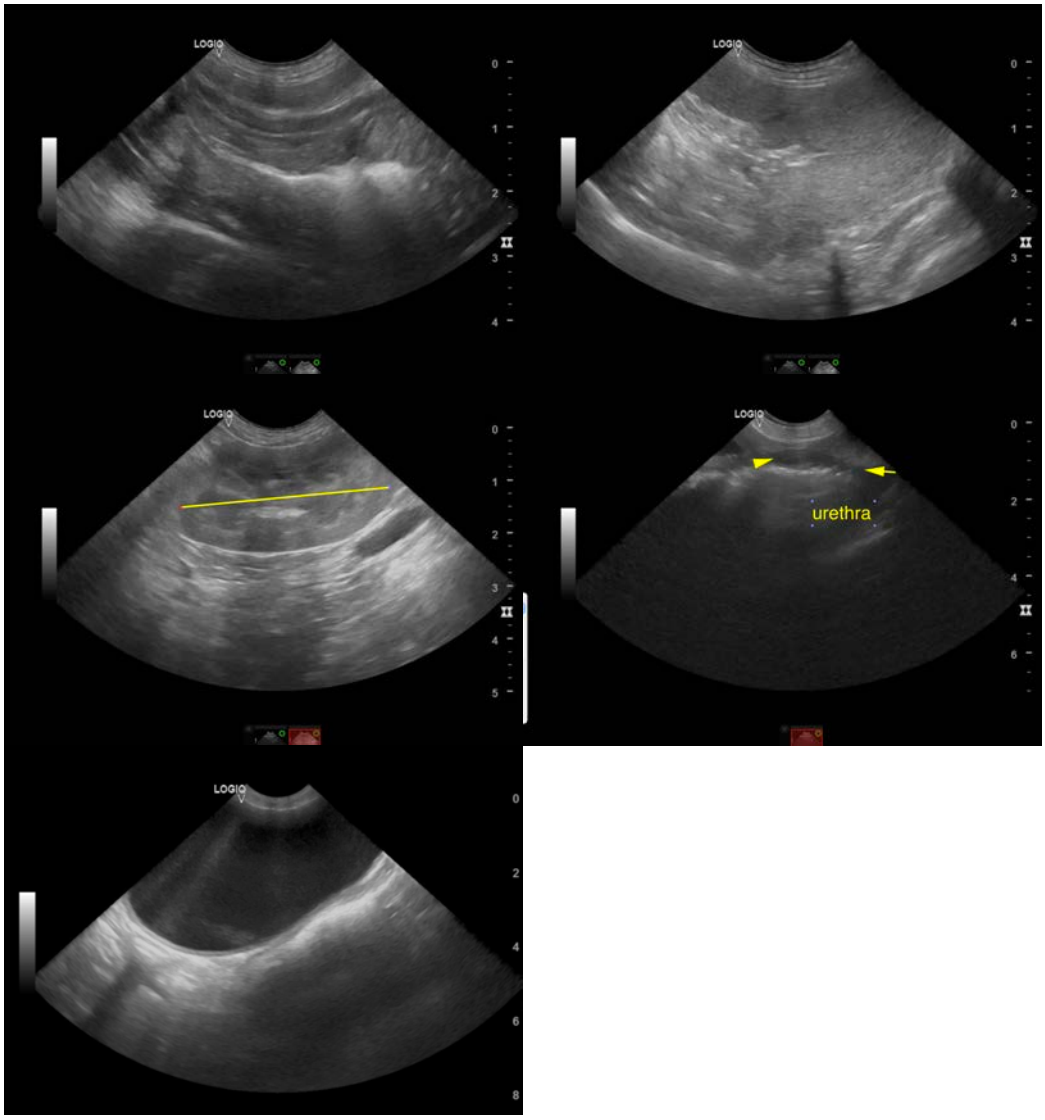

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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