



PATIENT PRESENTING CLINICAL SIGNS

Bella Hamilton Several week history of PU/PD. On bloodwork, Hct 37.8%, BUN 48, Creat 2.6, SDMA 18. U/A - SpGr 1.016, 75-100 WBC, TNTC rods. Urine culture pending

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Canine

Urinary System

BREED

Boston Terrier

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.

SEX

Spayed Female

The **kidneys** presented moderate chronic degenerative changes and interstitial nephrosis pattern with irregular contour and microinfarcts. The right kidney measured 4.33 cm with slight pyelectasia. The left kidney measured 4.5 cm with pyelectasia. Given the patient history, pyelonephritis is likely the cause of the pyelectasia.

AGE

13 Years

Adrenal Glands

WEIGHT

18 Pounds

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 0.59 cm at the caudal pole and 0.62 cm at the cranial pole. The right adrenal gland measured 0.69 cm at the cranial pole and 0.44 cm at the caudal pole.

Spleen

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

The **spleen** revealed a hyperechoic lipogranulomatous type nodule at the mid cranial body measuring 1.24 cm, not pathological.

Liver

IMAGING PERFORMED BY

Dr. Tam Mengine

The **liver** presented a hyperechoic lipogranulomatous type nodule measuring 1.44 cm. A moderate amount of remodeling was present with increased portal markings. The gallbladder and common bile duct were unremarkable.

Gastrointestinal

HOSPITAL NAME

Stoney Creek VH

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

REFERRING VET

Dr. Tam Mengine

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Some parenchymal remodeling, however, with mild deviation from curvilinear normalcy was observed. Pancreatic duct and capsular irregularities were present consistent with age related changes. If pain upon imaging (+ Murphy sign) was present or if the patient is focally painful in subxyphoid palpation then low-grade smoldering chronic pancreatitis should be suspected.

INVOICE

26574

DATE

10/21/21



PATIENT

Bella Hamilton

SPECIES

Canine

BREED

Boston Terrier

SEX

Spayed Female

AGE

13 Years

WEIGHT

18 Pounds

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Tam Mengine

HOSPITAL NAME

Stoney Creek VH

REFERRING VET

Dr. Tam Mengine

INVOICE

26574

DATE

10/21/21

ULTRASONOGRAPHIC FINDINGS

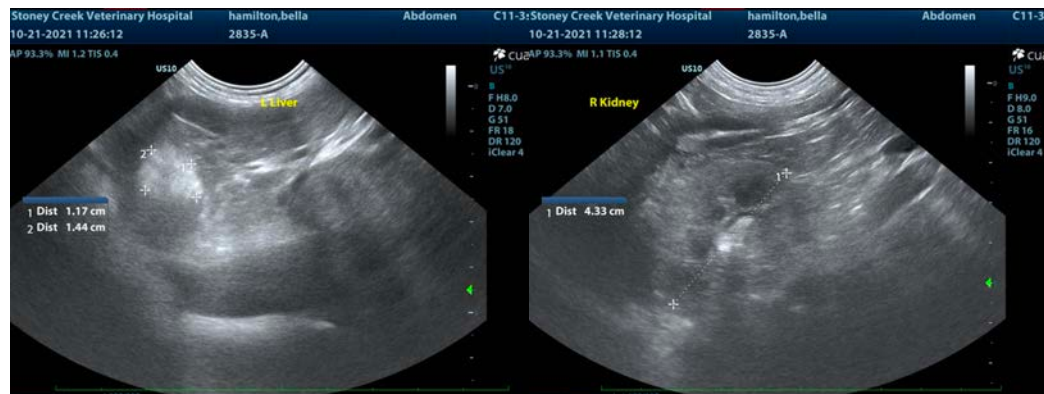
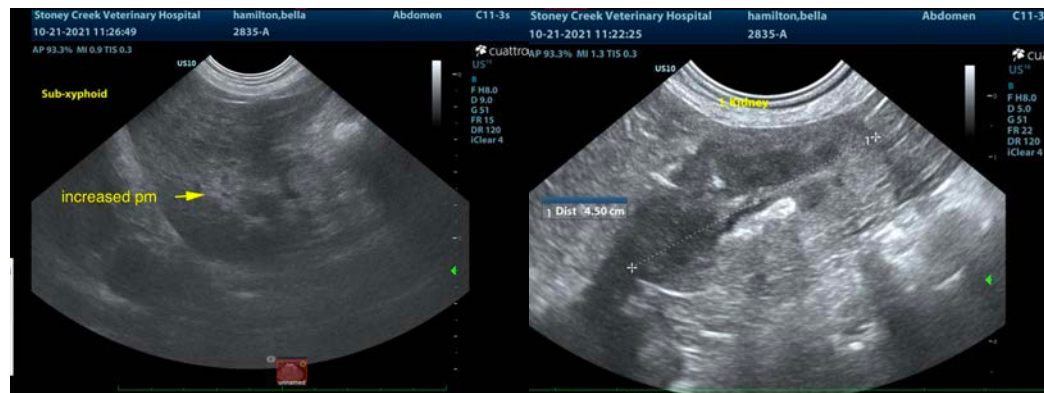
- Moderate degenerative renal disease with concurrent pyelonephritis pattern
- Moderate hepatic remodeling – subjectively benign
- Hyperechoic lipogranulomatous nodules in the spleen and liver

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Urine culture and sensitivity warranted with 72-hour IV fluid protocol, IV antibiotics, followed by long-term treatment for chronic pyelonephritis indicated. Enrofloxacin, Ceftiofur or similar may be the best option in this patient. 4-6 week antibiotic therapy is likely necessary. Blood pressure measurements warranted as well as renal oriented diet.

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.





PATIENT

Bella Hamilton

SPECIES

Canine

BREED

Boston Terrier

SEX

Spayed Female

AGE

13 Years

WEIGHT

18 Pounds



INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Tam Mengine

HOSPITAL NAME

Stoney Creek VH

REFERRING VET

Dr. Tam Mengine

INVOICE

26574

DATE

10/21/21

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
info@SonoPath.com