



**PATIENT PRESENTING CLINICAL SIGNS**

Agnes Snider

History: Reoccurring hematuria and pyouria with visible sludge and sand on xray, non responsive to antibiotics. Has a lot of health issues, has been on Tramadol, Metacam, CBD oil, Fish oil, Glucosamine and K Citrate.

**SPECIES**

Canine

Abnormal PE/Chem/CBC/UA Results: Last bloodwork normal last year in April. See attached urine results. Many repeat urine samples have been done.

**BREED**

English Bulldog

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The **urinary bladder** revealed a minor amount of adhered debris, a slight amount of sand and minor apical ventral cystitis pattern with bladder wall thickening. The pelvic urethra was imaged 2.0 cm beyond the cystourethral junction.

**SEX**

Spayed Female

The **right kidney** revealed normal size and contour with minor degenerative changes. The right kidney measured 5.55 cm.

**AGE**

10 Years

The **left kidney** was mildly enlarged and slightly swollen. No evidence of pyelectasia. The left kidney measured 6.9 cm. This may be a normal variant.

**Adrenal Glands**

**WEIGHT**

23.4 kg

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 2.0 cm x 1.02 cm at the cranial pole and 0.66 cm at the caudal pole. The left adrenal gland measured 2.17 cm x 0.65 cm at the caudal pole and 0.72 cm at the cranial pole.

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**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 were noted.

**IMAGING PERFORMED BY**

Crystal Hill

**HOSPITAL NAME**

Hartzel AH

**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.

**REFERRING VET**

Dr. Allo

**INVOICE**

13998

**Gastrointestinal**

Some retention of ingesta was noted in the **stomach**. The small intestine and colon were unremarkable.

**DATE**

2/19/22

**Pancreas**



**PATIENT**

Agnes Snider

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.

**SPECIES**

Canine

**ULTRASONOGRAPHIC FINDINGS**

- Cystitis bladder pattern with a minor amount of debris
- Stomach ingesta
- Mildly enlarged left kidney. Minor degenerative renal changes in the right kidney.
- Unremarkable abdomen otherwise

**BREED**

English Bulldog

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**SEX**

Spayed Female

Full urinary work up warranted. Given the pyuria in this patient, even though no bacteria is evident, underlying infection is suspected. I recommend culture on first A.M. sample via cystocentesis, as well as examination of vaginal vestibule for urine pooling or recessed vulva- it may be predisposing. Resistant infection suspected. Idiopathic sterile cystitis possible yet less likely. Chronic nidus of infection also a potential, given the chronic bladder changes. Otherwise, surgical removal of the cranial 1/3 of the urinary bladder with biopsy and culture could also be considered given that the wall thickening (approximately 8.0 mm at moderate repletion) appears to be apical and resectable even though fairly mild.

**AGE**

10 Years

**WEIGHT**

23.4 kg

**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.

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

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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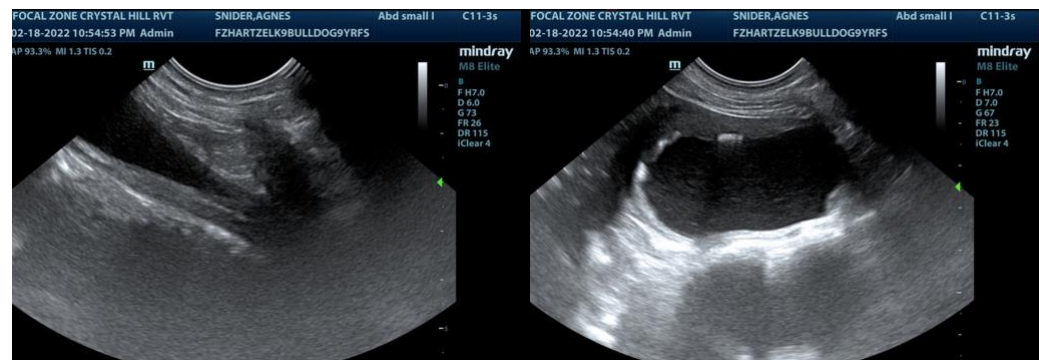
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**PATIENT**

Agnes Snider

**SPECIES**

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**BREED**

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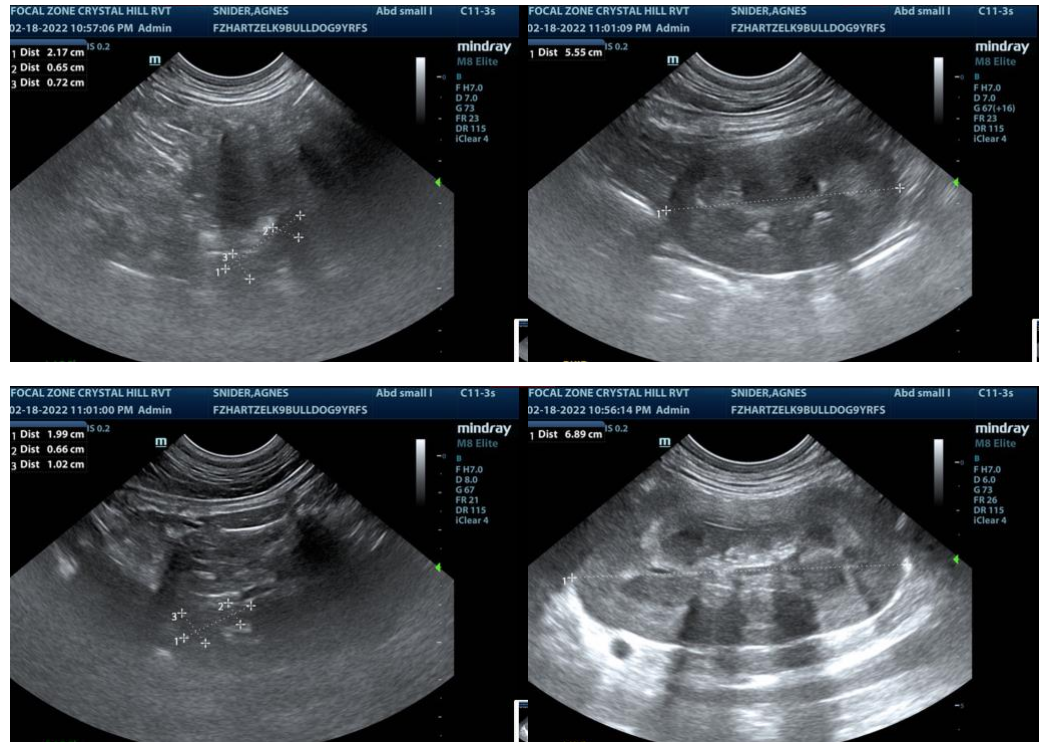
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**DATE**

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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.

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