

**DATE**

12/30/22

**PRESENTING CLINICAL SIGNS****PATIENT**

Olaf Suljak

History: Patient is having persistent hematuria. had been eating C/D diet forever, but recently changed to Royal Canin Urinary + Calm. Tried urinary stress diet but made him vomit. Has had urinary issues for 6 years, exacerbated by stress. Owner thinks things have gotten worse over the past several weeks due to increased stress from the holidays and inconsistent dosing with Prozac transdermal.

**SPECIES**

Feline

Current Medications: Buprenorphine.

Radiographs: Concern for possible bladder and kidney stones.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: IV Ace.

**BREED**

DSH

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

**SEX**

Neutered Male

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

The **urinary bladder** presented concentric wall thickening with loss of mural detail. Regional hyperechoic enhanced fat was noted with concurrent bladder sand and a bladder calculus (1.57 cm). A grouping of sand measured approximately 1.0 cm. Other small calculi and ulcerative changes were noted within the bladder wall. Some pelvic urethral and cystourethral junction sand was noted.

**AGE**

12/29/10

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. The left kidney measured 4.94 cm. The right kidney measured 4.94 cm.

**WEIGHT**

18.3 Pounds

**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 0.47 cm.

**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. Splenic fold was noted, yet uniform.

**HOSPITAL NAME**Animal Emergency  
Hospital**REFERRING VET**

Dr. Goessling

**INVOICE**

20294

**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**

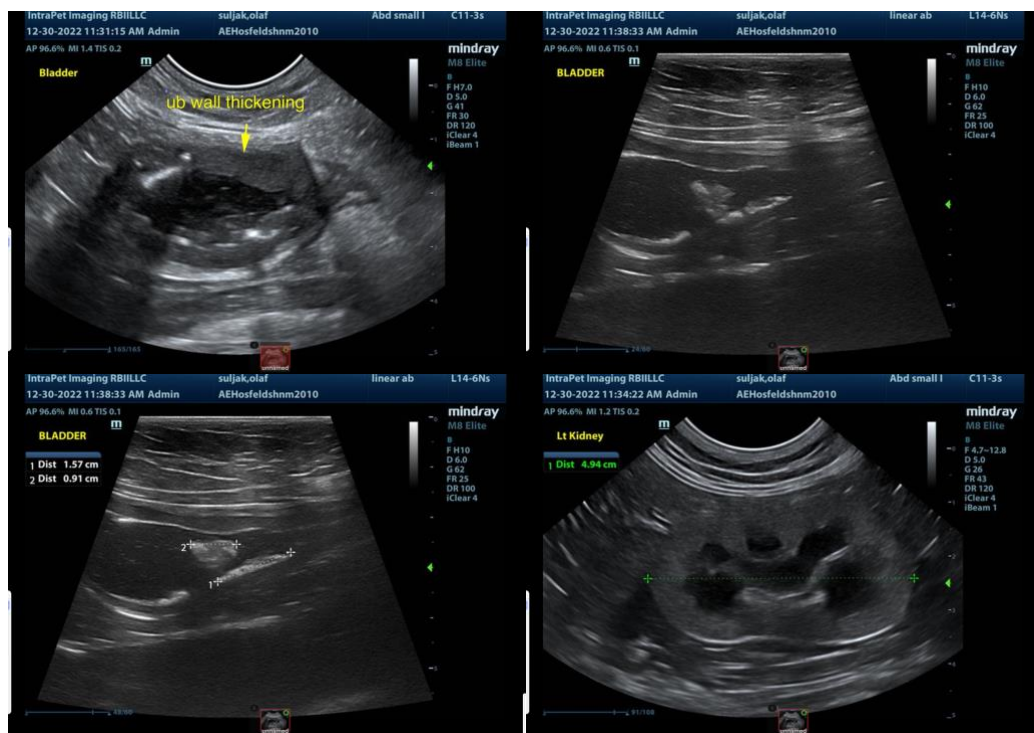
The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

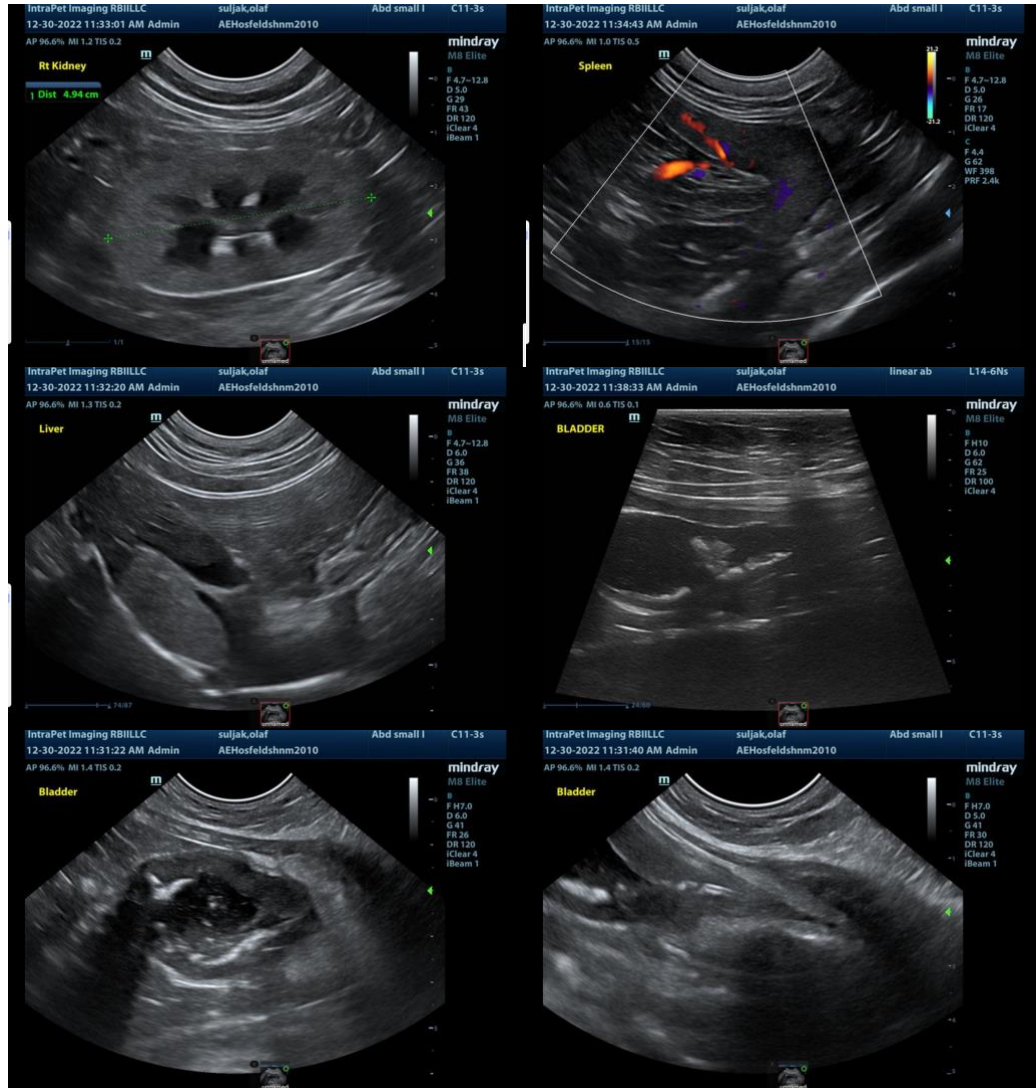
### **ULTRASONOGRAPHIC FINDINGS**

- Concentric bladder wall thickening with bladder sand and calculi, interstitial cystitis bladder pattern. Mild potential for underlying bladder carcinoma or lymphoma (less likely).
- Age-related renal changes
- Splenic fold

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

Cystotomy, normo- and retrograde flush with bladder sand and bladder wall biopsy analysis and culture are all indicated.





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