

**PATIENT PRESENTING CLINICAL SIGNS**

Khalani Breedon History: Recurring UTIs for past 2 years

**SPECIES** Abnormal PE/Chem/CBC/UA Results: Most recent urine culture (Jan 17, 2023) - E. coli >100,000 CFU/mL Resistant to amoxicillin/clavamox, cephalexin, cefpodoxime, susceptible to fluoroquinolones CBC, chemistry firmly WNL Current Medications marbofloxacin 100mg PO q24h Radiographic Findings NO uroliths appreciated on radiographs

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED**

Mastiff/St Bernard X

**Urinary System**

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. Luminal contents are anechoic. No cystic calculi are observed. The region of the trigone and the proximal urethra, visible to a depth of 4-5 cm, are normal.

**SEX**

Female Spayed

The left kidney is normal in size (7.48 cm in length) with a normal shape, and smooth peripheral contours. The lateral cortex is mildly heterogenous. There is mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**AGE**

3 years

The right kidney is normal in size (6.68 cm in length) with an irregular shape. The lateral cortex is variable in thickness and heterogenous in appearance. There is mild to moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, or hydroureter. Renal vasculature is normal.

**WEIGHT**

86 lbs

**Adrenal Glands**

The left adrenal gland is normal in size (0.74 cm at cranial pole) (0.61 cm at caudal pole) (3.83 cm in length) with a normal shape and homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**INTERPRETED BY**

Andrea Nicastro, DVM,  
Diplomate ACVIM (Small  
Animal Internal Medicine)

The right adrenal gland is in normal size (1.17 cm at cranial pole) (0.60 cm at caudal pole) (2.83 cm in length) with a normal shape and homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**IMAGING PERFORMED BY**

Sara Hansen

**Spleen**

The spleen is normal in size (1.65 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

**HOSPITAL NAME**

Albany AH

**Liver**

The liver is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative, or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed.

**REFERRING VET**

Dr Spangler

The gall bladder is of normal contours and contains some dependent echogenic debris. The wall is normal in thickness. No choleliths are observed. The cystic and common bile ducts are normal/not seen.

**INVOICE**

12663

**Gastrointestinal**

The gastric lumen is not distended. The gastric wall is normal in thickness with a normal layering pattern. The small intestinal lumen is not dilated. The small intestinal wall is normal in thickness with retention of the normal layering pattern. There is slight disruption in the normal 1:3 muscularis: mucosal

**DATE**

4.4.23

ratio in several segments. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

#### ***Pancreas***

The region of the left limb is largely isoechoic relative to surrounding omental fat. The margins are curvilinear. No focal lesions are observed. The pancreatic duct is not overtly dilated. (See also "Free Abdomen" category).

#### ***Free Abdomen***

The mesentery in the right cranial quadrant is hyperechoic. There is no obvious evidence of free fluid. The abdominal lymph nodes are normal/not visible.

#### ***Other***

The uterine stump is visible (0.50 cm in width). No obvious pathology is observed.

### **ULTRASONOGRAPHIC FINDINGS**

#### **Primary Findings**

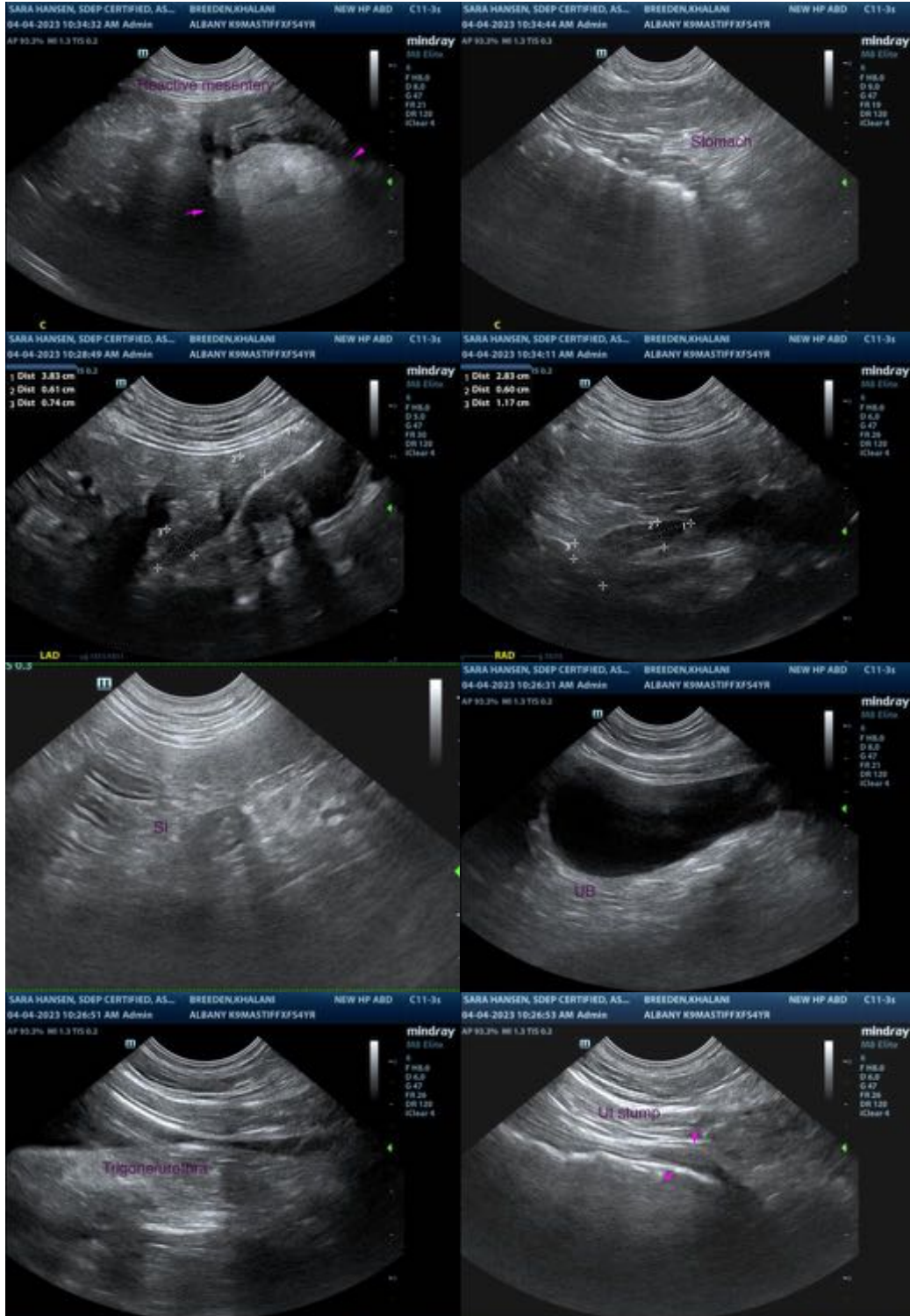
- The bilateral renal changes are suggestive of chronic nephropathy. Changes are more pronounced on the right side. Considerations include renal dysplasia or prior insult (i.e., infection, infarcts), other.

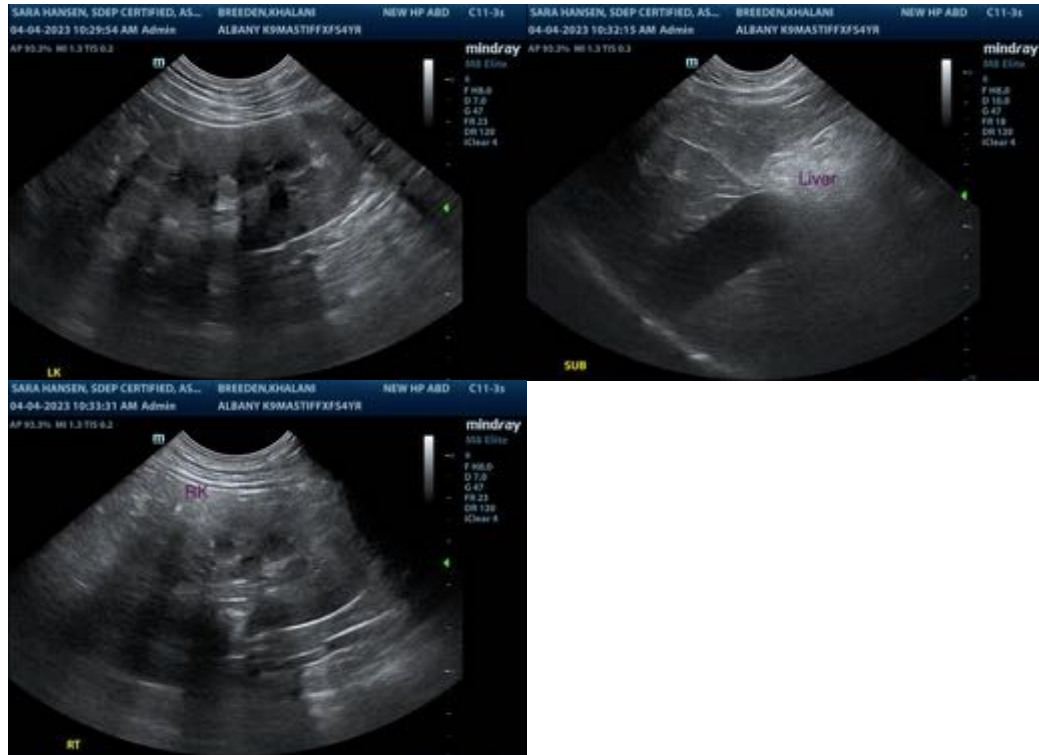
#### **Secondary Findings**

- Focal peritonitis in the right cranial quadrant, the cause of which is unclear. Considerations include mild pancreatitis, gastroenteritis, other.

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

- Baseline lab work, including a CBC, chemistry panel, and T4 is recommended (if not already performed) to assess overall metabolic function.
- Given the recurring urinary tract infection, a more prolonged antibiotic course (i.e., 3-4 weeks) may be warranted with a culture performed halfway through the treatment regimen and again 5-7 days following the last dose of antibiotics. Periodic (i.e., every 3 months) monitoring urine cultures is also recommended.
- An evaluation of the patient's external genitalia should also be considered to assess for predisposing factors.
- Primary supplementation (i.e., Cranadin) is also an option. However, its benefits are controversial..





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.

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