**DATE PRESENTING CLINICAL SIGNS**

2/3/23 History: Stranguria, hematuria for several weeks.

**PATIENT**

Bonnie Malinowski

Current Medications: Convenia 40mg SQ.

Lab Results: normal renal values, elevated WBC 20.7. URINE: SG 1.028  
hematuria 3+, WBC 4-11, RBC 11-20, Rods 100+ BOOD

Radiographs: small, irregular R kidney with calculi; possibly gall bladder with stones?

**SPECIES**

Feline

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**BREED**

DSH

Imaging Performed By: Stephanie Warga RDCS, RVT.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****SEX**

Spayed Female

**Urinary System**

The urinary bladder mucosa, trigone, and visible urethra are normal in thickness and there is no evidence of mucosal irregularities. The bladder lumen is mildly distended with anechoic urine and bladder thickness is considered normal for volume of urine. Anechoic debris is observed within the lumen. No masses, inflammatory changes or calculi are observed.

**AGE**

6/4/2008

The left kidney is normal in shape and echogenicity with smooth peripheral margins and contour, measuring 3.17 cm. There is mild to moderate decrease in corticomedullary distinction. Scant pyelectasia is noted, measuring 1.0 mm. There is no evidence of nephroliths, infarcts or hydroureter.

**WEIGHT**

11.4 Pounds

The right kidney measures 3.79 cm. It is normal in shape and structure with a normal corticomedullary distinction for this patient. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

**INTERPRETED BY**

Jessica Midence, DVM,  
DACVIM (SAIM)

**Adrenal Glands**

The left adrenal gland is normal in size at 0.41 cm thick. The left adrenal gland has normal shape and it is normal in appearance and echogenicity.

**HOSPITAL NAME**

Honeygo AH

The right adrenal gland is normal in size at 0.4 cm thick. The right adrenal gland has normal shape and it is normal in appearance and echogenicity.

**Spleen**

The spleen is normal in thickness with a slightly undulating border. Echotexture is homogeneous with parenchyma hyperechoic to liver and renal cortical parenchyma. The splenic vasculature is normal without signs of congestion or thrombosis.

**REFERRING VET**

Dr. Mullinex

**Liver**

The liver is subjectively normal in size with normal contours, structure, with smooth peripheral margins. The echogenicity appears normal with normal portal markings. No overt evidence of inflammatory, infiltrative or regenerative pathology is evident. The visible portions of the vasculature and biliary tract appear normal. No pathological hepatic lymphadenopathy observed.

**INVOICE**

20984

The gallbladder lumen is small with anechoic bile. The wall is a normal thickness and smooth. The cystic and common bile ducts are normal/not visible.

**Gastrointestinal**

The gastric lumen is empty. The stomach wall is of normal wall thickness, with some variability due to rugal folds. There is normal gastric wall layering. There are no masses or focal lesions observed.

The visualized areas of duodenum and ileum appear normal in thickness. In certain loops of jejunum, there is a slight thickening of the muscularis, although overall thickness of the bowel is normal. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material. No focal lesions observed. The ileocolic junction was visualized and had normal intact wall layering and is subjectively or normal thickness.

Sections of colon are visualized with formed fecal material and gas shadowing distally. The colon measures normal. There is no observed focal or generalized colon wall thickening or loss of layering.

### ***Pancreas***

The left pancreas is normal in size. The left pancreas is hypoechoic with surrounding bright and indistinct fat that continues up toward the body of the pancreas.

In the right cranial abdomen, cranial to the kidney and caudal to the liver, there is a large cystic structure, measuring 2.78 cm in one length and 4.28 cm in another plane. The structure has a smooth distinct wall with a small amount of dependent echogenic debris and a stone or mineralization. This structure can be seen in certain video loops connecting with the pancreatic duct and it abuts the duodenum. There is some irregularity at this connection point and some mild surrounding hyperechoic fat.

### ***Free Abdomen***

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The omentum is of normal uniform echogenicity.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

- Moderate active pancreatitis of the left limb with a large pancreatic pseudocyst containing debris and a stone (vs bates body).
- Normal bladder

### **Secondary Findings**

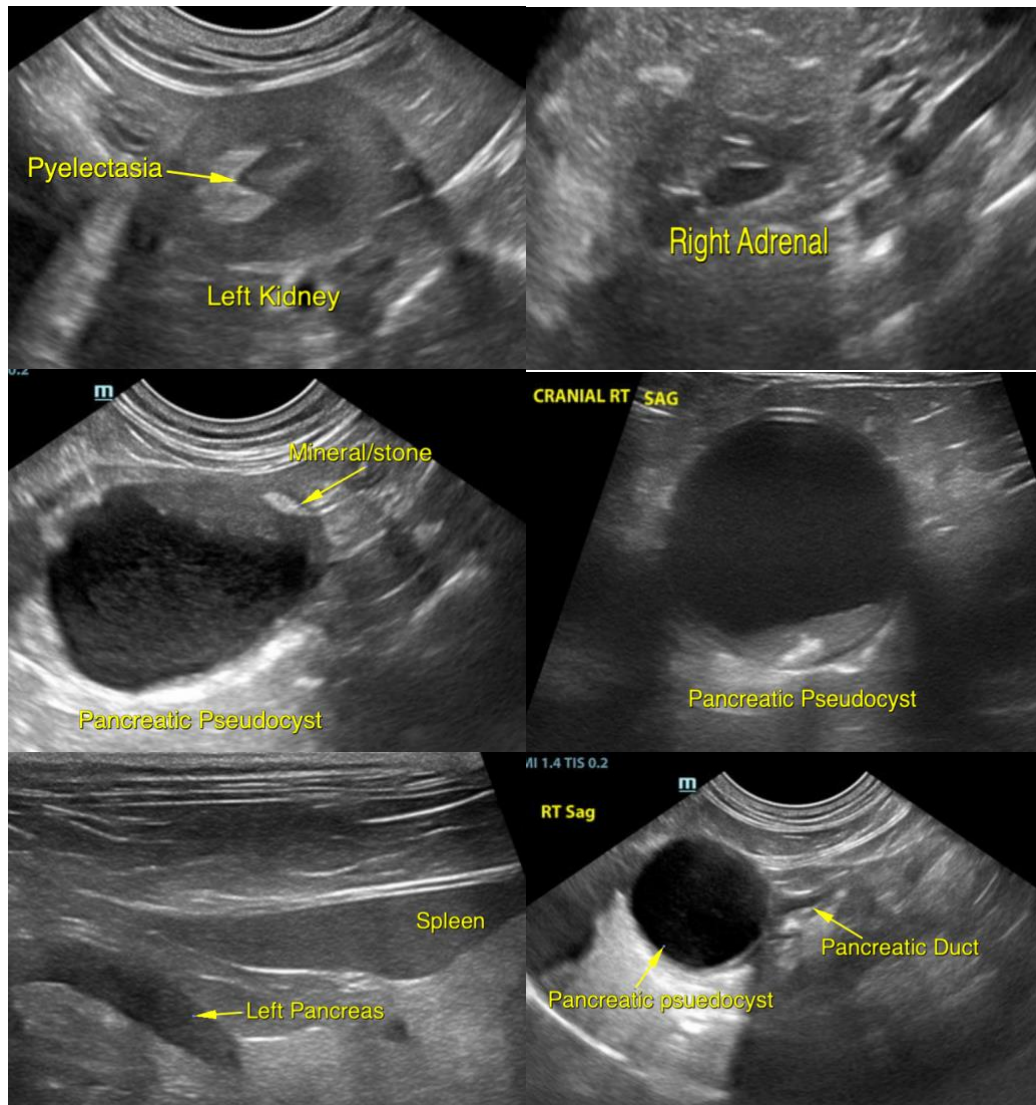
- Chronic degenerative renal changes on the left
- Focal areas of small intestinal muscularis thickening

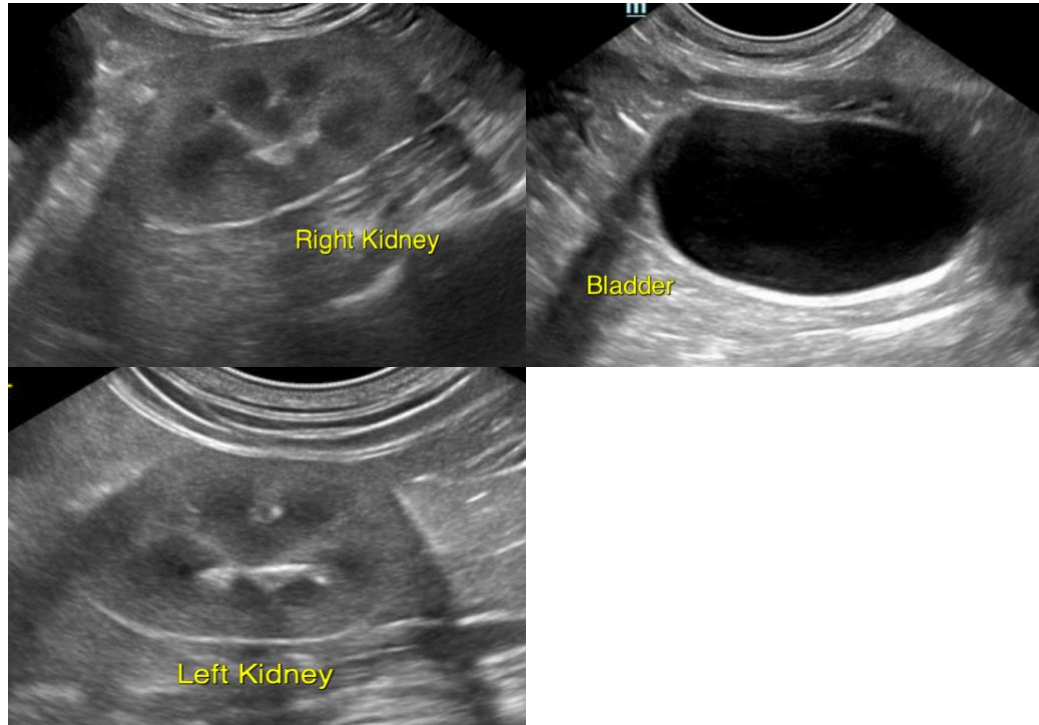
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Within the lower urinary tract, there is no obvious cause for the reported hematuria and stranguria. Consider urine culture to confirm proper antimicrobial choice. Also consider a lower urinary tract diet (such as Hills C/D, Royal Canin Urinary S/O, or other), and other treatment for inflammatory cystitis, such as pain medications, calming agents, and medications, etc.

The most abnormal finding on this examination is the presence of moderate active pancreatitis in the left limb of the pancreas, as well as a large pancreatic pseudocyst that contains echogenic dependent debris and a calculus or bates body. While these are often sterile and clinically quiescent, fine needle aspirate to sample/drain the fluid for cytology and culture are recommended to confirm. Empiric corticosteroids could be considered after confirming sterility to attempt to encourage involution of the cyst, though they are often clinically silent, and therefore surgical management is not usually necessary, unless they are so large that they cause a mass effect or they are infected. The moderate active pancreatitis and this pseudocyst could be contributing to inflammatory cystitis, as any systemic illness can result in lower urinary tract signs.

There is evidence of early degenerative changes to the kidneys, and there are some areas of intestinal muscularis thickening, though these are considered clinically insignificant at this time.





**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.

**Jessica Midence, DVM, DACVIM (SAIM)**

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