

**DATE PRESENTING CLINICAL SIGNS**

8/30/22 Patient presented for exam with bloody urine on 8/23/22- kidney stones found on x-rays. A month previous on 7/22/22 patient was vomiting and not eating.

**PATIENT**

Sheamus Tobin

Current Medications: Cyclavance oral 100mg/mL 0.5mL SID started 9/2021. Prednisolone 5mg 2 SID started in 2019.

Lab Results: 8/26/22 UA- crystals/RBCs.

Radiographs: Small kidney stone.

**SPECIES**

Feline

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**BREED**

Maine Coon

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

Neutered Male

**Urinary System**

Urinary bladder is not fully distended, but contains primarily anechoic contents with some occasional echogenic non-shadowing debris. Apical urinary bladder wall is diffusely thick. Mucosa is hyperechoic and irregular with multiple pedunculated masses extending into the lumen of the bladder. No cystoliths are observed. The trigone and visible pelvic urethra are normal thickness with a smooth mucosal surface.

**AGE**

12/22/17

The right kidney is normal in size (4.84 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia or infarcts observed. Non-obstructive areas of mineralization/nephroliths are noted.

**WEIGHT**

19.6 Pounds

The left kidney is normal in size (4.65 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia or infarcts observed. Non-obstructive areas of mineralization/nephroliths are noted.

**INTERPRETED BY**Beth Johnson, DVM  
DACVIM**Adrenal Glands**

The right adrenal gland is normal in size (0.35 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**IMAGING PERFORMED BY**Stephanie Warga  
RDCS, RVT

The left adrenal gland is normal in size (0.35 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**HOSPITAL NAME**

Celebrie Vet Hospital

**Spleen**

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

**REFERRING VET**

Dr. Garrett

**Liver**

The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

**INVOICE**

40858

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

### ***Gastrointestinal***

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

### ***Pancreas***

Pancreas is prominent (enlarged) in size, hypoechoic to surrounding tissue and has a mildly irregular undulating contour. Parenchyma is coarse with mixed echogenic remodeling noted. Pancreatic duct dilation is noted.

### ***Free Abdomen***

There is no evidence of free peritoneal effusion noted in these images.

There is no apparent lymphadenopathy noted in these images.

## **ULTRASONOGRAPHIC FINDINGS**

- **Polypoid Cystitis** – Urinary bladder wall changes are most consistent with polypoid cystitis. Infiltrative neoplasia cannot be ruled out but is considered less likely given the appearance of the polyps.
- Chronic active pancreatitis suspected
- Non-obstructive nephrolithiasis bilaterally

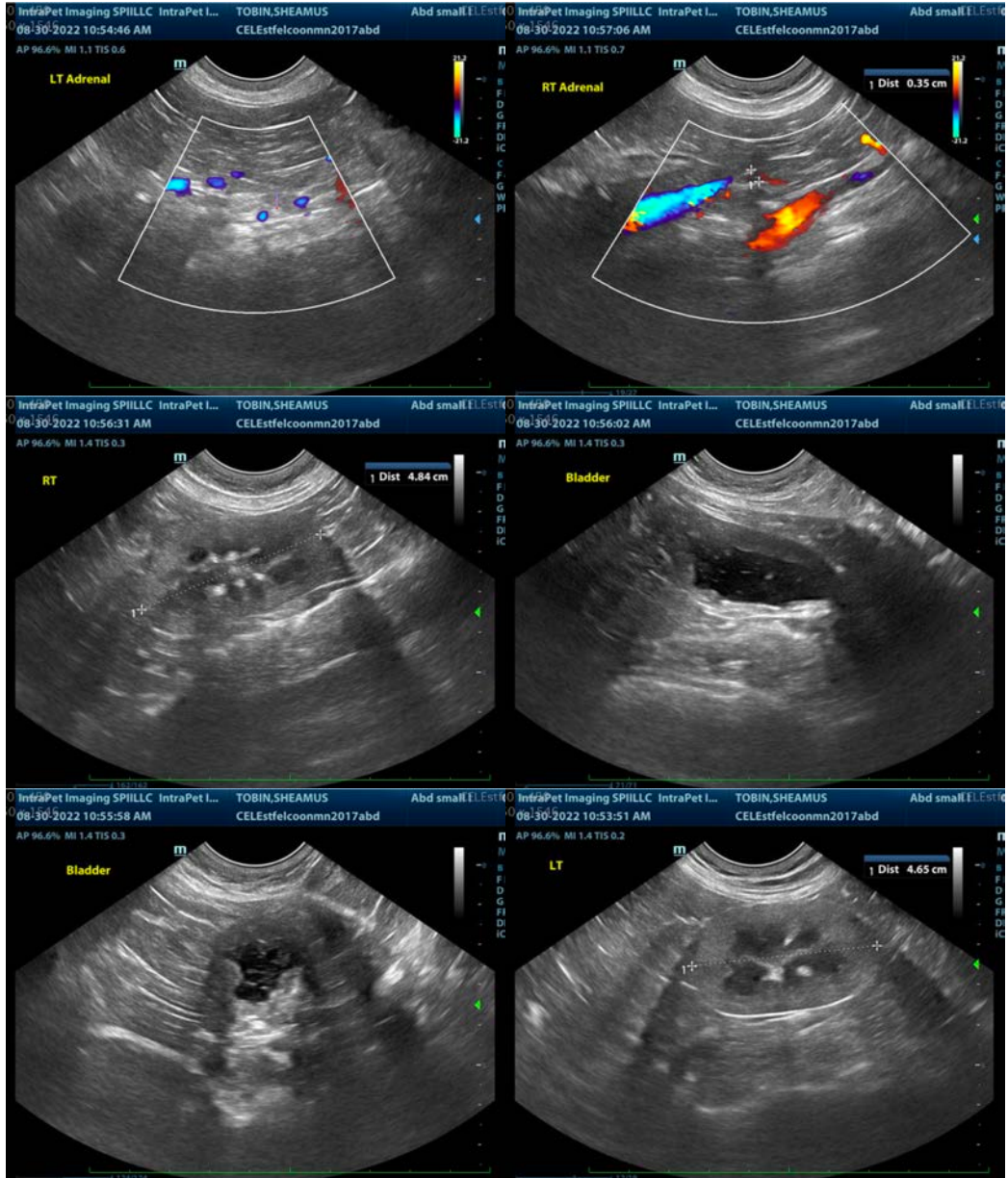
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

A urine culture is recommended despite the lack of bacteriuria just to rule out an occult urinary tract infection.

In the face of negative urine culture(s) and no cystoliths, masses, etc., these urinary signs are most consistent with sterile cystitis or feline lower urinary tract disease (FLUTD).

Recommendations include maximizing water consumption (water fountains, canned food, etc.) as well as reducing stress (recommendations can be found at Indoor Cat Initiative out of The Ohio State University CVM). Transition to a urinary health diet such as Royal Canin Urinary SO (or similar) could also be considered. If medical management does not help resolve clinical signs, ultimately cystoscopy or even alternatively surgery may be indicated to thoroughly flush the urinary bladder and biopsy the bladder wall for histopath as well as deep culture.

In the meantime, this patient has reportedly been taking steroids for several years for gastrointestinal signs, and chronic steroids could be contributing to the lower urinary tract signs. If possible, steroids could be tapered or even discontinued with alternative approaches to the suspected gastrointestinal disease with diet, cobalamin supplementation (if indicated based on a GI panel), deworming, etc. The gastrointestinal tract appears normal in these images. However, changes could be masked by the current steroid administration.





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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