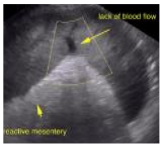
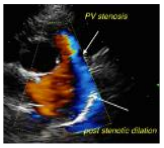
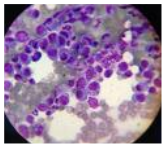
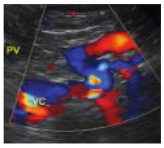
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™






SonoPath.com
1-800-838-4268 info@sonopath.com

**PATIENT**

Luca Maguire

**SPECIES**

Canine

**BREED**

Terrier

**SEX**

Neutered Male

**AGE**

14 years

**WEIGHT**

16 lbs

**INTERPRETED BY**

Tam Mengine, DVM, DABVP (canine/feline practice)

**IMAGING PERFORMED BY**

Dr. Tam Mengine

**HOSPITAL NAME**

Stoney Creek VH

**REFERRING VET**

Dr. James Peters

**INVOICE**

13525

**DATE**

6.29.23

## PRESENTING CLINICAL SIGNS

History: Several weeks of intermittent vomiting and decreased appetite. IRIS Stage 3 renal failure with casts in urine found on recent lab-work. Patient was fasted 17 hrs for this ultrasound.

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

***Urinary System***

The urinary bladder is moderately distended with anechoic urine. The ureteral papillae, trigone and pelvic urethra are of normal appearance, and the ureters are not visible (normal). There are multiple tiny, shadowing uroliths present. No masses are noted. Urethra visualized to 3.0 cm.

The prostate is of appropriate size for patient age and neutering status, with a homogenous parenchyma and smooth capsule. There is a tiny, nonobstructive nephrolith noted within the prostatic urethra. The urethra is non-dilated with normal margins.

Both kidneys exhibit mildly decreased corticomedullary differentiation. There are small, non-obstructed nephroliths present within the renal medulla. There is no evidence of pyelectasia or hydronephrosis. The proximal ureters are not visible (normal). The left kidney is 3.7 cm in length. The right kidney is 4.2 cm in length.

***Adrenal Glands***

The adrenal glands are both identified in their normal locations. They are normal in size and shape with appropriate parenchymal echogenicity and normal phrenic vasculature. The left adrenal gland height is 4.1 mm at the cranial pole and 3.7 mm at the caudal pole. The right adrenal gland height is 9.2 mm at the cranial pole and 5.7 mm at the caudal pole.

***Spleen***

A 1.0 x 0.7 cm hypoechoic is noted in the tail of the spleen, which does not disrupt the splenic capsule. The surrounding omentum is normal. The splenic vasculature is normal with no evidence of congestion or thrombosis, and blood flow through the splenic hilus appears normal.

***Liver***

The liver is of appropriate size and shape, with sharp borders and a mildly coarse parenchymal echotexture that is hypoechoic to the spleen. The portal and hepatic vasculature are of normal size and appearance with no evidence of congestion or thrombosis.

The gallbladder is markedly with anechoic contents and a large amount of freely-moveable echogenic sludge. The wall was thin and continuous with no focal lesions. The cystic and common bile ducts are normal / not visible.

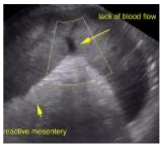
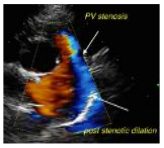
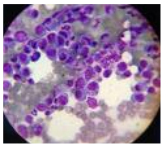
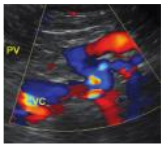
***Gastrointestinal***

The stomach is moderately distended with normal ingesta. The gastric wall is 2.3 mm with normal deviations due to rugal folds and exhibits appropriate wall layering. The pylorus is of normal appearance.

The visualized portions of the duodenum, jejunum, and ileum are of normal thickness with intact wall layering that exhibits the appropriate 1:3 muscularis to mucosa ratio. The duodenum is diffusely corrugated. The duodenal wall measures 3.4 mm. The jejunal wall measures up to 4.2 mm. Intestinal motility appears normal.

The visible portions of the colon are of normal thickness, up to 1.5 mm, with intact wall layering. The ileocecal junction is visualized and appears normal.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

SonoPath.com
1-800-838-4268 info@sonopath.com

**PATIENT**
Luca Maguire

**SPECIES**
Canine

**BREED**
Terrier

**SEX**
Neutered Male

**AGE**
14 years

**WEIGHT**
16 lbs

**INTERPRETED BY**
Tam Mengine, DVM, DABVP (canine/feline practice)

**IMAGING PERFORMED BY**
Dr. Tam Mengine

**HOSPITAL NAME**
Stoney Creek VH

**REFERRING VET**
Dr. James Peters

**INVOICE**
13525

**DATE**
6.29.23

***Pancreas***
The areas of the limbs and body of the pancreas are isoechoic to the surrounding mesenteric fat, with normal capsular appearance. There is no evidence of peripancreatic inflammation. The pancreatic duct appears normal.

***Free Abdomen***
There is no evidence of free fluid within the peritoneal cavity. The omentum and intra-abdominal fat are of appropriate echogenicity. Enlarged abdominal lymph nodes are not observed. The aortic trifurcation has normal blood flow with no evidence of thrombosis.

## ULTRASONOGRAPHIC FINDINGS

### Primary Findings

- Bilateral nephroliths and many tiny uroliths within the urinary bladder
- Hypoechoic splenic nodule

### Secondary Findings

- Bilateral chronic renal changes

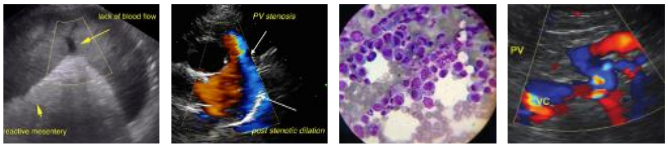
## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

While there is evidence of aging change in both kidneys, it is possible that the presence of nephroliths is impacting renal function transiently (when stones are being passed). Increasing fluid intake, and potentially performing a cystotomy to remove the stones in the urinary bladder may be of benefit, especially if azotemia improves.

The nodule in the spleen is concerning for early neoplasia, although a benign nodule is also possible. One approach would be to perform a fine-needle aspirate of this nodule for cytology. Alternatively, a splenectomy could be performed and a cystotomy at the same time.

The presence of ingesta in the stomach with the fasting history, is consistent with delayed gastric emptying. Treatment with antiemetics, prokinetics, and a bland diet may be of benefit.


SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™




SonoPath.com
1-800-838-4268 info@sonopath.com

**PATIENT**

Luca Maguire

**SPECIES**

Canine

**BREED**

Terrier

**SEX**

Neutered Male

**AGE**

14 years

**WEIGHT**

16 lbs

**INTERPRETED BY**

Tam Mengine, DVM, DABVP (canine/feline practice)

**IMAGING PERFORMED BY**

Dr. Tam Mengine

**HOSPITAL NAME**

Stoney Creek VH

**REFERRING VET**

Dr. James Peters

**INVOICE**

13525

**DATE**

6.29.23






**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.

**Tam Mengine, DVM, DABVP (canine/feline practice)** info@SonoPath.com