



**PATIENT**

Lucy Arroyo

**SPECIES**

Canine

**BREED**

Mixed breed

**SEX**

Female, spayed

**AGE**

8 Yrs. 9 months

**WEIGHT**

61.8 lbs.

**INTERPRETED BY**

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

**IMAGING PERFORMED  
BY**

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Diplomate ACVIM  
(*Small Animal Internal  
Medicine*)

**HOSPITAL NAME**

Meadowlawn Market  
Commons

**REFERRING VET**

Dr. Clemons

**INVOICE**  
13673

**DATE**  
4/22/26

**PRESENTING CLINICAL SIGNS**

Pt has a history of recurring hematuria and pyuria. Had bacteriuria on the first urinalysis but has not had it since. No obvious calculi on abdominal radiographs. Pt's hematuria responds to antibiotics but then clinical signs recur approximately 3 weeks after stopping therapy. CBC chem WNL. USG 1.036 with proteinuria. Pt was heartworm positive and just finished treatment.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder is mildly distended. The wall in the region of the apex is variably thickened (up to 1.33 cm) and irregular. Mineralized debris is observed in various spots along the mucosal surface. There is questionable mineralization within the thickened portion of the bladder wall. Mobile mineralized sand is also seen within the lumen. The region of the trigone and the urethral wall, visible to a depth of 4.5-5 cm, are normal. A scant amount of mineralized sand is observed within the urethral lumen. The lumen is not overtly dilated.

The left kidney is normal in size (6.17 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

The right kidney is normal in size (5.86 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

**Adrenal Glands**

The left adrenal gland is normal in size (0.43 cm at cranial pole) (0.60 cm at caudal pole) 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.

The right adrenal gland is normal in size (1.52 cm at cranial pole) (0.78 cm at caudal pole) 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.

**Spleen**

The spleen is normal in size (1.28 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.

**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. The portal vein to caudal vena cava ratio is approximately 1:1.

The gallbladder is of normal contours and contains some dependent echogenic debris. The wall is



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normal in thickness. No choleliths are observed. The cystic and common bile ducts are normal.

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**Gastrointestinal**

The gastric lumen is moderately distended with ingesta. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall is normal in thickness with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The ileocecolic junction and colonic wall are normal. There is no evidence of an obstructive pattern.

**Pancreas**

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

**Lymph nodes**

The abdominal lymph nodes are normal/not visible.

**Free Abdomen**

The peritoneal cavity is normal. There is no evidence of inflammation or effusion.

**Other**

A brief echocardiogram reveals no evidence of pericardial effusion or obvious right atrial/auricular mass.

**ULTRASONOGRAPHIC FINDINGS**

**Primary Findings:**

- The urinary bladder wall changes are most consistent with cystitis with a lower possibility of emerging neoplasia. Mineralized sand is also observed within the lumen and possibly imbedded within the mucosal surface and wall. Scant urethral sand is also present.

**Secondary Findings:**

- Mild bilateral nonspecific, age-related renal changes with subtle dystrophic mineralization
- If the patient was fasted for this study, the presence of ingesta within the gastric lumen could suggest delayed gastric emptying.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

- A urine culture and sensitivity is recommended, preferably 5-7 days following the last dose of antibiotics. Depending on results, further treatment may be warranted. A more prolonged antibiotic course may also be indicated given the recurrent nature of the infection.
- Other considerations include the following:
  1. Initiation of a cranberry supplement
  2. Use of baby wipes on the anal area following bowel movements

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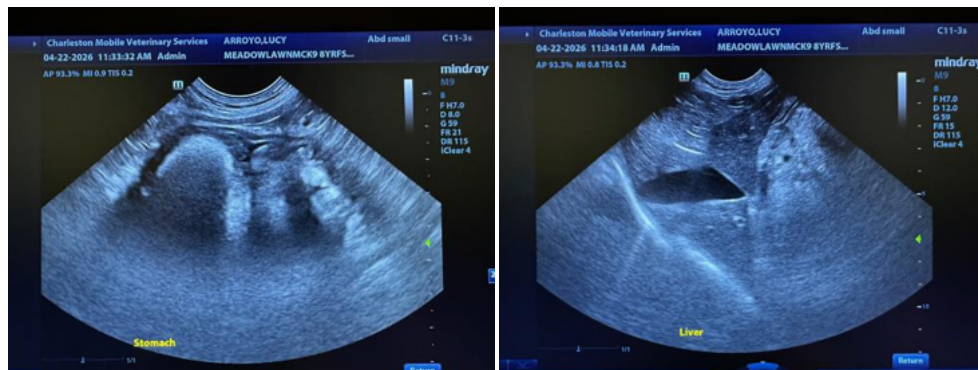
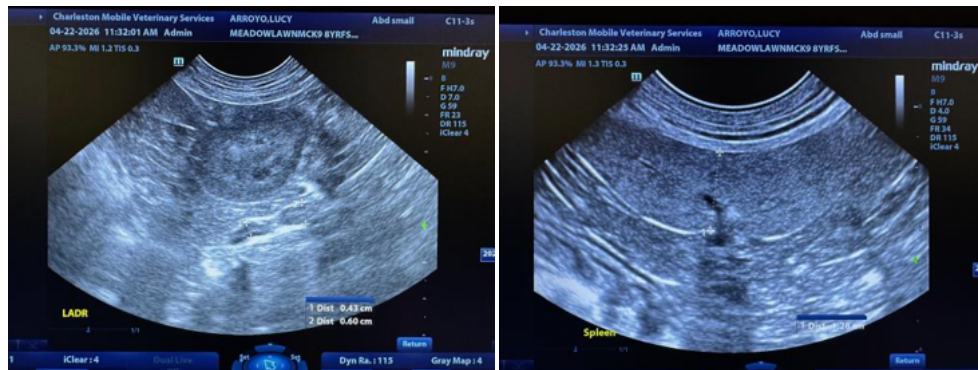
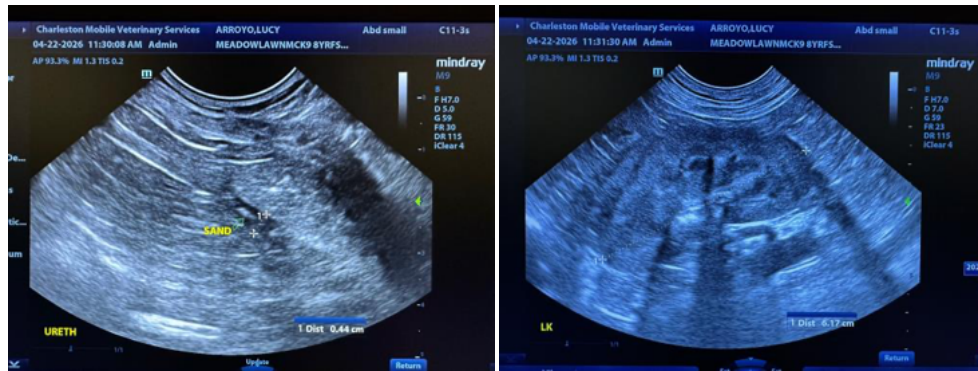
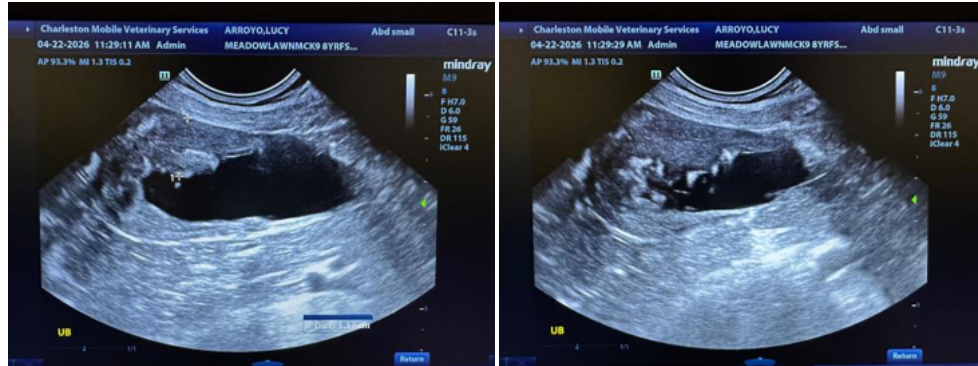
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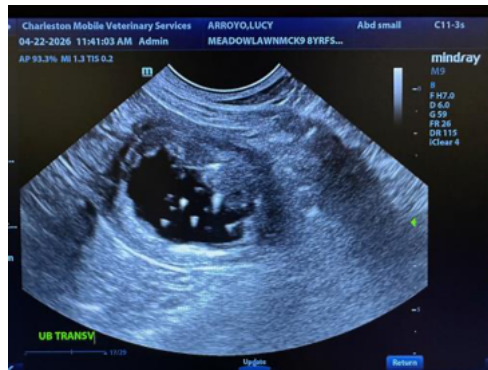
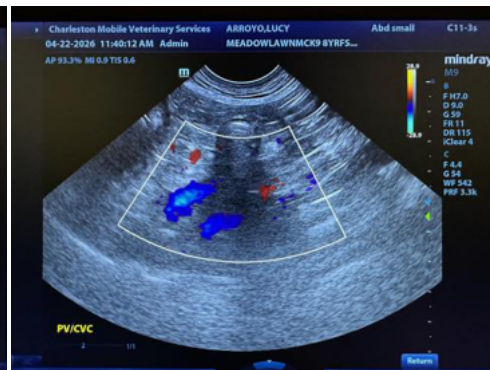
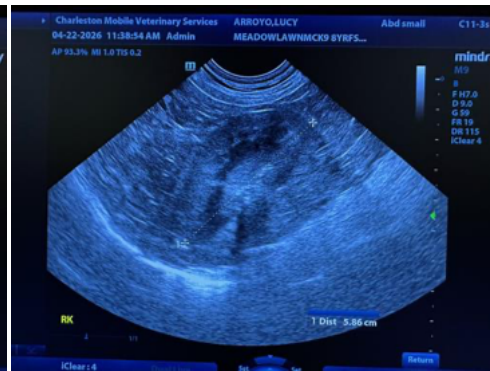
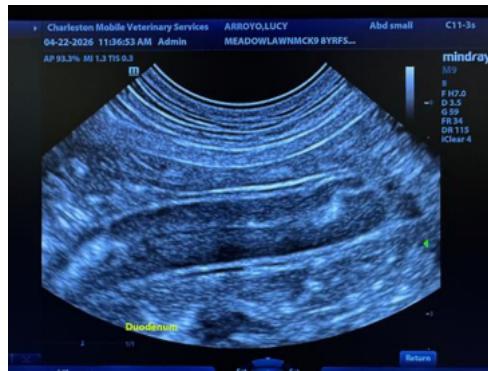
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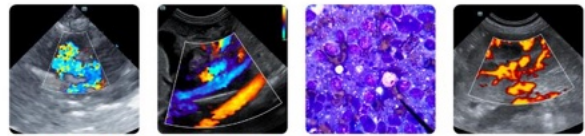
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)  
[info@SonoPath.com](mailto:info@SonoPath.com)

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