



## PATIENT PRESENTING CLINICAL SIGNS

**Pecas Cherry** History: Has history of urinary incontinence at rest and while asleep. Also, history of dribbling urine but not all the time.

**SPECIES** Abnormal PE/Chem/CBC/UA Results: Small infantile vulva with a prominent dorsal vulvar fold. Urine collected U/S guided cysto for U/A and C&S., After initial AUS exam gave furosemide 20 mg IV and then rescanned bladder and urethral papilla. U/A USG 1.027 Trace protein, rest unremarkable

Canine

## BREED

Medium Mixed

## SEX

Spayed Female

## AGE

1 year, 4 mos

## WEIGHT

23.65 kg

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Dr. Brian Barnes

## HOSPITAL NAME

Westview VH

## REFERRING VET

Dr. Brian Barnes

## INVOICE

11276

## DATE

7.27.22

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The **urinary bladder** is evaluated pre-and post-furosemide administration. Pre-furosemide, the bladder is mostly contracted. The visible luminal contents are anechoic. The wall is subjectively normal in size for the level of repletion and folded on itself. No cystic calculi are observed. Post-furosemide, the bladder is moderately distended with anechoic urine. The wall is normal in thickness with a smooth mucosal surface. The left and right ureteral papillae are visualized, with urine visibly exiting the both papillae. The cystourethral junction and visible portion of the proximal urethra are normal.

The **left kidney** is normal size (6.09 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The **right kidney** is normal size (7.05 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

### Adrenal Glands

The **left adrenal gland** is normal size (0.53 cm at cranial pole) (0.52 cm at caudal pole) (2.68 cm in length); normal shape; 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 size (0.74 cm at cranial pole) (0.66 cm at caudal pole) (2.98 cm in length); normal shape; 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 (1.34 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. No pathological hepatic lymphadenopathy observed.

The **gall bladder** lumen is moderately distended. The wall is thin and smooth. Luminal contents are anechoic. The cystic and common bile ducts are normal/not seen.

### ***Gastrointestinal***

The **gastric lumen** is mildly distended with ingesta. The gastric wall is normal in thickness with a normal layering pattern. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

### ***Pancreas***

The region of the **pancreas** is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

### ***Free Abdomen***

The **peritoneal cavity** is normal. There is no evidence of inflammation or effusion. The abdominal **lymph nodes** are normal/not visible.

## **ULTRASONOGRAPHIC FINDINGS**

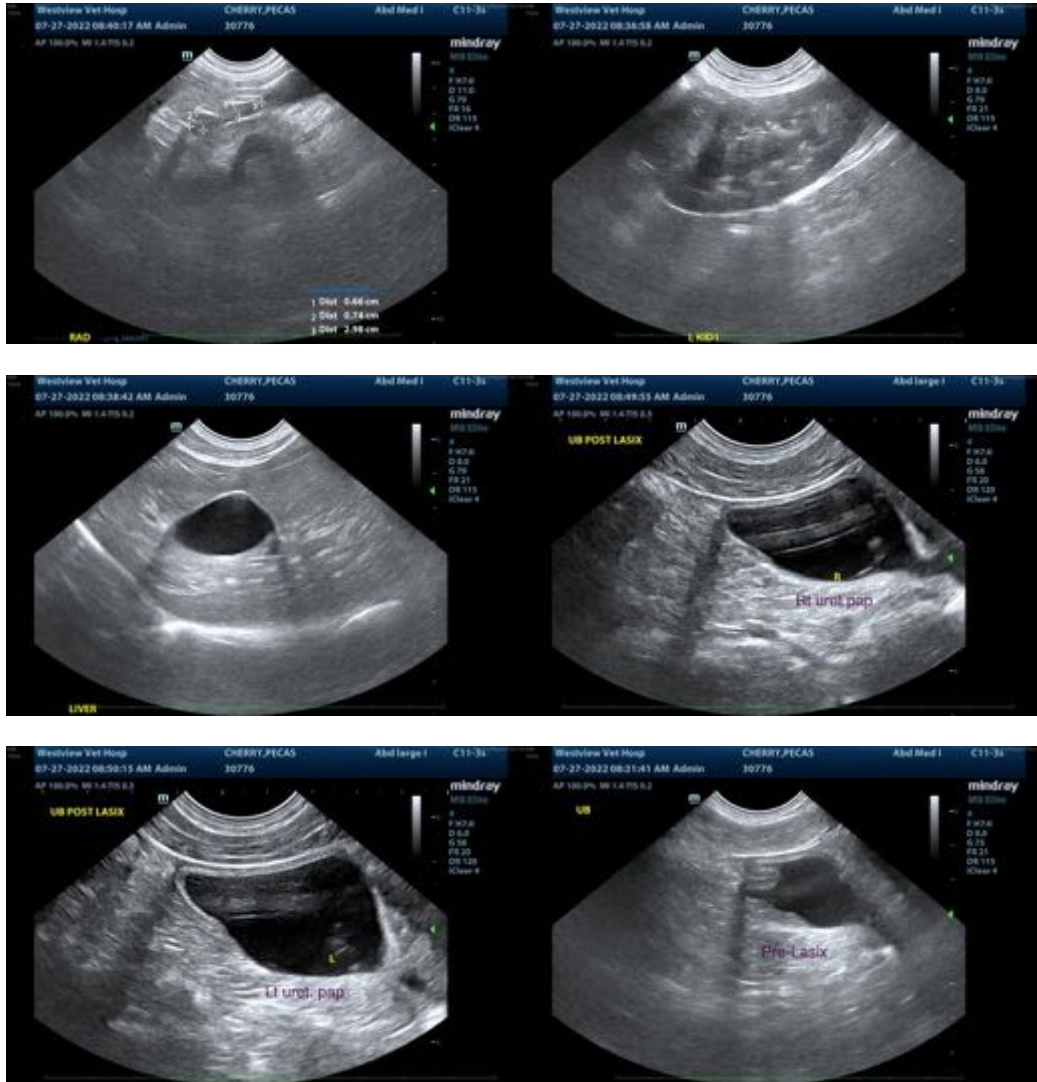
### **Primary Findings**

- Unremarkable abdomen. An obvious cause for the patient's urinary signs is not identified in this study. Considerations include urinary tract infection, urethral sphincter mechanism incontinence, ectopic ureters (with multiple urine exit points), underlying neurologic disease (less likely), other.

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

Baseline lab-work, including a CBC chemistry panel and T4 is recommended to assess overall metabolic function. A neurologic examination is also recommended to assess for subtle deficits. If the above diagnostics are inconclusive, consider empirical treatment for urethral sphincter mechanism incontinence (i.e., phenylpropanolamine or estrogen therapy). To further exclude the possibility of ectopic ureters, a contrast abdominal CT scan can be considered.





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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