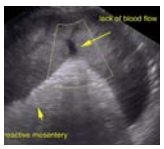
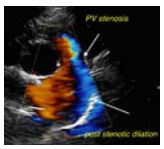
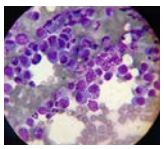
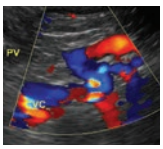
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

**PATIENT**

Emmi Zakalik

**SPECIES**

Canine

**BREED**

Pit Bull X

**SEX**

Spayed Female

**AGE**

13 Years

**WEIGHT**

53 Pounds

**INTERPRETED BY**

Beth Johnson, DVM DACVIM

**IMAGING PERFORMED BY**

Dr. Elaina Petrone

**HOSPITAL NAME**

Long Branch AH

**REFERRING VET**

Dr. Elaina Petrone

**INVOICE**

39437

**DATE**

7/12/22

## PRESENTING CLINICAL SIGNS

Age doesn't not seems correct for this patient. I would estimate 5-6 years old. History of leaking urine while asleep. Possible history of elevated renal values. CBC/chem/T4/UA/urine culture pending. I walked patient after scanning, she only urinated a small amount, I walked her again an hour later, again small amount, no straining. when I rescanned her bladder it was still moderately full. If lab work is wnl I was considering a trial of bethanecol?

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

Urinary bladder is moderately overdistended. It has a normal uniform wall thickness (<0.2 cm). Contents include primarily anechoic fluid combined with both gravity dependent and suspended echogenic non-shadowing debris within the fluid. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

The right kidney is normal in size (6.2 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, mineral or infarcts observed.

The left kidney is normal in size (5.5 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, mineral or infarcts observed.

### *Adrenal Glands*

The adrenal glands are unable to be visualized in these images.

### *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.

### *Liver*

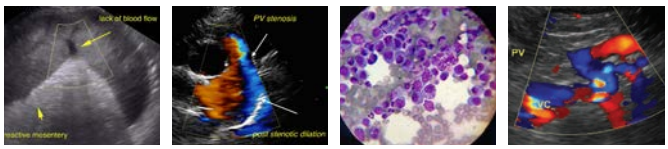
The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal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

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 mildly distended with very echogenic reverberation artifact from intraluminal gas . There is no evidence of obstruction, foreign material or infiltrative disease; however, complete visualization of far wall is partially inhibited by gas. 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.



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

**PATIENT**

Emmi Zakalik

**SPECIES**

Canine

**BREED**

Pit Bull X

**SEX**

Spayed Female

**AGE**

13 Years

**WEIGHT**

53 Pounds

**INTERPRETED BY**

Beth Johnson, DVM DACVIM

**IMAGING PERFORMED BY**

Dr. Elaina Petrone

**HOSPITAL NAME**

Long Branch AH

**REFERRING VET**

Dr. Elaina Petrone

**INVOICE**

39437

**DATE**

7/12/22

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

### *Pancreas*

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

### *Free Abdomen*

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

There is no apparent lymphadenopathy noted in these images.

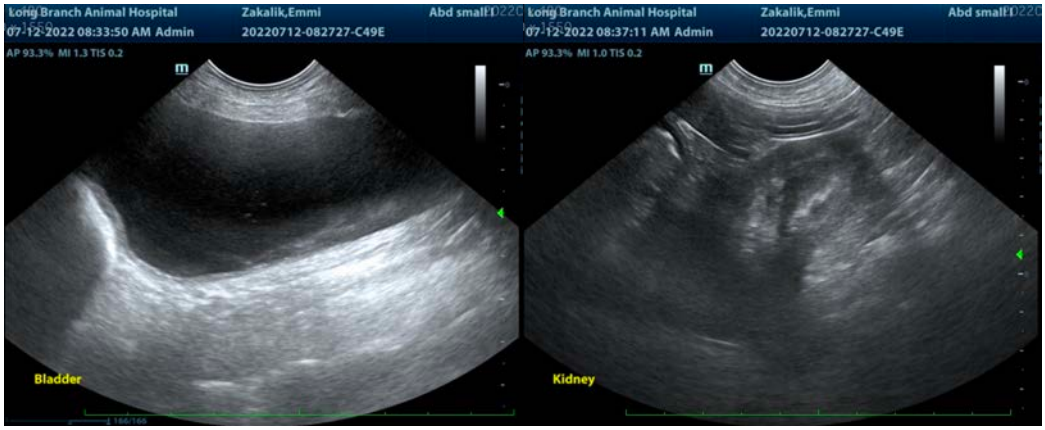
## ULTRASONOGRAPHIC FINDINGS

- Urinary bladder debris with moderate subjective overdistention of the urinary bladder – This fits with the clinical report of not fully emptying the bladder and consequent overflow leakage.

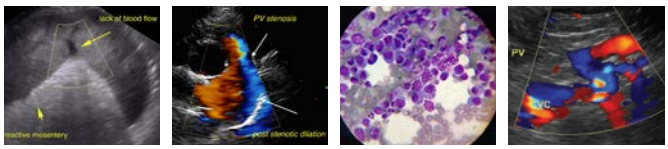
## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

As reported in the history, CBC/Chem panel, electrolytes and urinalysis are pending. If indicated based on urinalysis results, a urine culture is recommended. This patient's reported history is urine leakage due to not fully voiding the bladder during normal urination. If the metabolic panel, urinalysis, etc. are normal, and her urinary leakage is determined or believed to be overflow leakage, next steps could include consultation with a neurologist for further evaluation of a possible neurologic cause for inability to fully void, or empirical therapy, as is reportedly planned, for urine retention.

I typically recommend Prazosin or similar alpha blocker to relax the lower urinary tract prior to Bethanecol to prevent stimulating urination against a constricted lower urinary tract. If Prazosin alone doesn't help allow full voiding and therefore minimize urine leakage, then I add Bethanecol. Prior to management with these medications, a blood pressure is recommended if not recently evaluated.



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

**PATIENT**

Emmi Zakalik

**SPECIES**

Canine

**BREED**

Pit Bull X

**SEX**

Spayed Female

**AGE**

13 Years

**WEIGHT**

53 Pounds

**INTERPRETED BY**

Beth Johnson, DVM
DACVIM

**IMAGING PERFORMED BY**

Dr. Elaina Petrone

**HOSPITAL NAME**

Long Branch AH

**REFERRING VET**

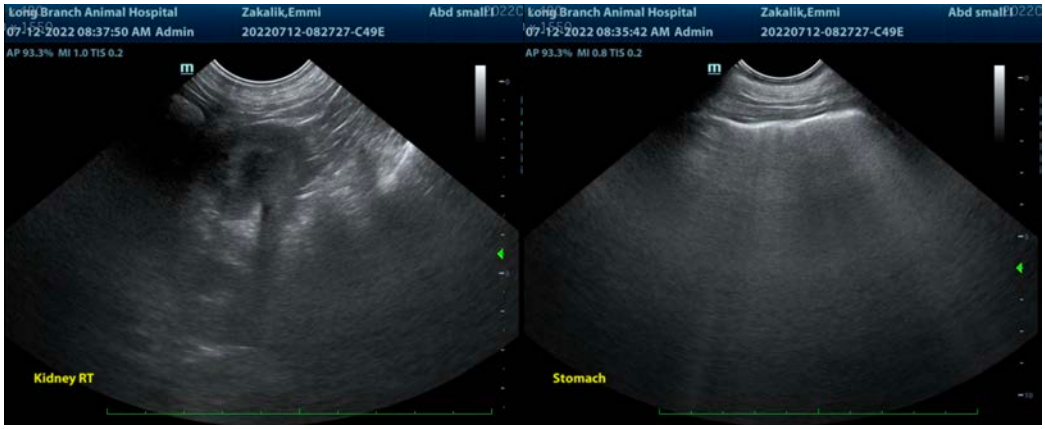
Dr. Elaina Petrone

**INVOICE**

39437

**DATE**

7/12/22




**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.

**Beth Johnson**, DVM, DACVIM
Beth.Johnson@sonopath.com