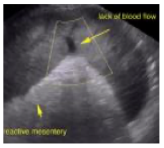
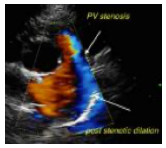
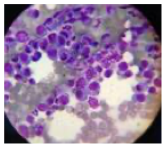
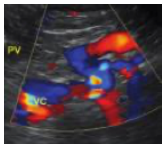
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT
Al Scholl

SPECIES
Feline

BREED
DSH

SEX
Neutered Male

AGE
10 years

WEIGHT
7 kg

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

IMAGING PERFORMED BY
Erin Wicks

HOSPITAL NAME
Shores Vet Emerg Ctr.

REFERRING VET
Dr. Slenbaker

INVOICE
11443

DATE
8.19.22

PRESENTING CLINICAL SIGNS

History: Presented at our hospital for inability to use all four limbs. O stated P was normal, but last night they came home to find P unable to use his legs. P is not eating, drinking, urinating, or defecating. O stated when P tries to stand up, he knuckles over in the front and will fall over.
Previous Health Concerns: UTIs ~5-6 years ago

Abnormal PE/Chem/CBC/UA Results: Cardiovascular: occasional gallop; femoral pulses palpable;
Abdominal: soft/ tender deep under spine
Musculoskeletal: no palpable issues; walks plantigrade HL's; does knuckle FL's when tries to walk.
rad- no obvious fb/ effusion/ obstruction; ventral deviated colon with very widened retroperitoneal space- possible effusion)
EPOC- pH 7.080(L) Na 147(L) K+ 7.5(H) iCa+ (0.90) (L) Cl 130 (L) BUN >120 (H) Cr 10.15(H)
pre-surg- BUN >140 (H) Cr 8.6(H)
UA- Cocci present (+++) rbc sp g 1030 (+++) leukocytes
proBNP- abnormal- secondary to decreased clearance vs true cardiac disease

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** wall is normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. The region of the trigone and the visible portion of the proximal urethra are normal. A dilated ureter is visualized measuring 0.41 cm in diameter, dorsal to the bladder. There is at least one questionable ureterolith within the lumen. The mesentery surrounding the bladder is hyperechoic. A small amount of retroperitoneal fluid is observed.

The **left kidney** is enlarged (5.14 cm in length); with a relatively normal shape. The cortex is variably thickened. There is poor corticomedullary distinction. Hydronephrosis is present (1.73 cm in the transverse plane). There is no evidence of nephroliths or infarcts. The proximal left ureter is visible/dilated. The mesentery surrounding the kidney is hyperechoic with a small amount of retroperitoneal fluid present.

The **right kidney** is enlarged (5.11 cm in length); with a slightly irregular shape. The cortex is variably thickened. There is poor corticomedullary distinction. A 0.37 cm nonobstructive nephrolith is observed within the renal pelvis. Moderate to severe pyelectasia is present (0.70 cm in the transverse plane). There is no evidence of infarcts. The proximal right ureter is visible/dilated. The mesentery surrounding the kidney is hyperechoic. A small amount of retroperitoneal fluid is observed.

Adrenal Glands

The region of the **adrenal glands** is evaluated. No obvious pathology is observed.

Spleen

The **spleen** is normal in size (0.78 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. A bilobed conformation is present. The wall is thickened (up to 0.32 cm) and edematous with a "double-walled" effect. A scant amount of echogenic to mineralized gravity dependent debris/sand is observed within the lumen. The cystic and common bile ducts are normal.

Gastrointestinal

The **stomach and intestine** are free of stasis and exhibit normal peristaltic activity. The gastric lumen is mildly fluid distended. 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 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

Trace free fluid is observed. The abdominal **lymph nodes** are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Bilateral renomegaly with hydronephrosis/severe pyelectasia (more pronounced on the left side). Bilateral proximal hydroureter is present. A ureter is also visualized near its entry point, at the level of the trigone with a questionable ureterolith within the lumen. Diffuse retroperitonitis is present, likely secondary to renal pathology.

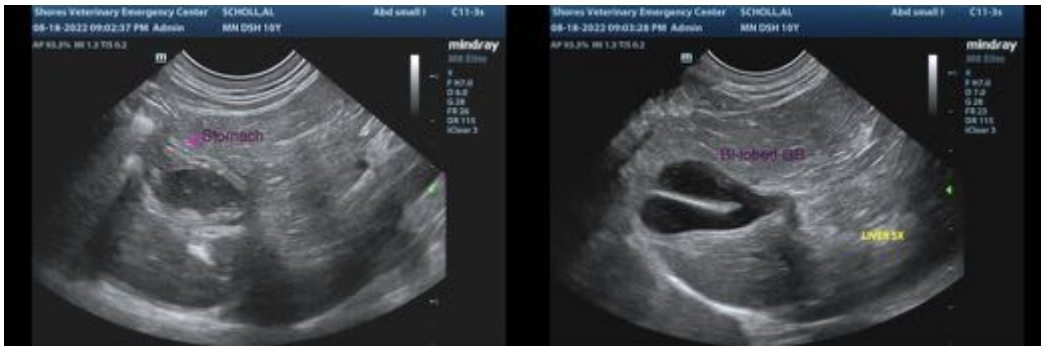
Secondary Findings

- The gall bladder edema may be secondary to increased hydrostatic pressure (i.e., fluid overload), low oncotic pressure, cholecystitis, other. The bilobed gall bladder conformation is likely incidental.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given the patient's clinical history, consider the following:

1. IV fluid diuresis with close monitoring for fluid overload. If possible, urine output should be calculated. If the patient's renal values do not improve with fluid therapy, referral for hemodialysis can be considered.
2. A baseline blood pressure measurement as well as a urinalysis and urine culture and sensitivity are recommended.
3. Consider three-view thoracic radiographs and an echocardiogram to evaluate for underlying heart disease, which may affect the rate of acceptable IV fluid administration.
4. Consider additional sonographic images of the ureters to determine if multiple ureteroliths are present. Alternatively, an abdominal CT scan can be considered to better assess renal and ureteral pathology (once the patient is stabilized).


Stomach

Bi-lobed GB
LIVER SX


R KID

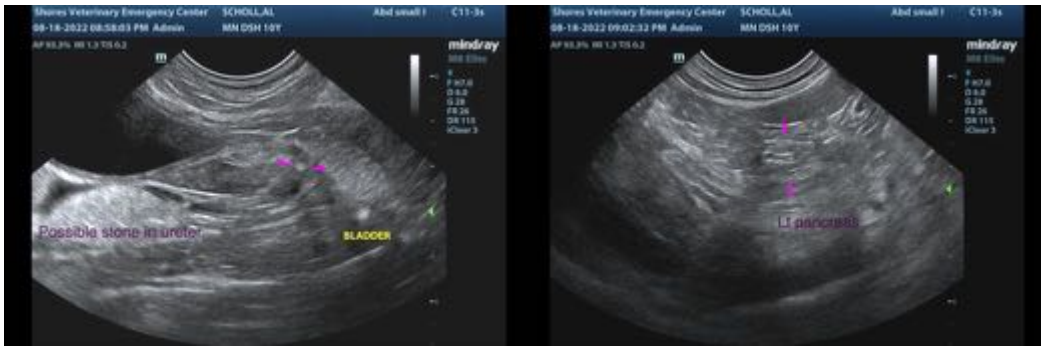
BLADDER


BLADDER

Urethra
BLADDER


Retroperitonitis

L KID



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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