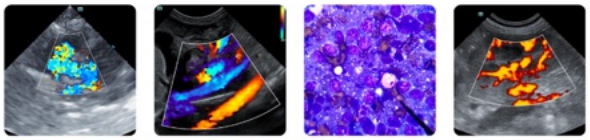


PATIENT

Muffin Sirotowitz

SPECIES

Canine

BREED

Shih Tzu

SEX

Neutered male

AGE

13 years

WEIGHT

24 lbs

INTERPRETED BY

Dr. Alicia Angosto Guerrero

IMAGING PERFORMED BY

Dr. Striano Kaplan

HOSPITAL NAME

Ramsey VH

REFERRING VET

Dr. Stewart

INVOICE

72285

DATE

3/6/26

PRESENTING CLINICAL SIGNS

- Hx of diarrhea - has been controlled on forti flora/wd diet, hx of bladder stones/ cystotomies x 2- on potassium citrate SID and gabapentin SID - scheduled for another cystotomy potentially 3-11 with veterinary surgeon.
- Spec cPL: 225 (mildly elevated) TLI >50.0 B-12 831 (normal) Folate 12.9 *normal) Geriatric profile pending

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The bladder lumen is mildly underdistended. The urinary bladder wall appears thickened and irregular in the cranial portion, measuring up to 7.5 mm. The lumen contains fine mineral sediment as well as several small calculi measuring approximately 3.67, 3.83, and 4.89 mm. These findings are consistent with cystolithiasis with associated inflammatory changes.

The urethra appears normal and free of visible calculi; however, ultrasonography is not always the most sensitive imaging modality for evaluating urethral urolithiasis.

The left kidney is normal in shape and size: 4.59×2.10 cm, with cortical thickness measuring 0.48 cm in the sagittal plane.

The right kidney is normal in shape and size: 5.10×2.35 cm, with cortical thickness measuring 0.50 cm in the sagittal plane. A small cortical cyst measuring 2.4×2.9 mm is identified.

In both kidneys, the cortex is isoechoic relative to the liver parenchyma. The corticomedullary ratio is normal and corticomedullary definition is preserved. A few very small mineral foci are noted within the renal calyces, compatible with minimal mineral sediment. There is no evidence of pyelectasia, nephrolithiasis, or hydronephrosis.

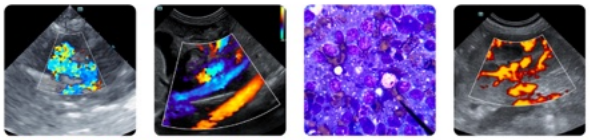
The prostate is small, homogeneous, and hypoechoic, compatible with post-orchiectomy prostatic atrophy.

Adrenal Glands

Both adrenal glands show normal shape and echogenicity. Dorsoventral diameters measured in the sagittal plane are within normal limits. The left adrenal gland measures 0.58 cm at the cranial pole and 0.62 cm at the caudal pole. The right adrenal gland measures 0.51 cm at the cranial pole and 0.50 cm at the caudal pole.

Spleen

Splenic thickness measures 1.44 cm. The parenchyma appears mildly heterogeneous, with diffuse areas of varying echogenicity and a few markedly hyperechoic foci, which may represent fibrosis, myelolipomas, or benign age-related changes (siderotic plaques / Gamna-Gandy bodies). The splenic capsule is smooth and regular.



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Liver

The liver is subjectively normal in size, with sharp edges and a regular contour. The hepatic parenchyma appears uniform and isoechoic relative to the falciform fat. A small hyperechoic focus measuring approximately 4.7×5.8 mm is identified, compatible with benign changes such as focal fibrosis, nodular hyperplasia, or mineralization (e.g., biliary or fibrotic focus). No hepatic lymphadenopathy is observed.

The gallbladder lumen is normally distended. The wall is thin and the contents are primarily anechoic with a small amount of biliary sludge. No dilation of the cystic duct or common bile duct is observed.

Gastrointestinal

The stomach is empty and folded, with mural thickness measuring 2.62 mm and preserved wall layering. A gas pattern is present within the lumen. The pylorus measures 4.51 mm.

The duodenum measures 4.11 mm, with mucosa measuring 2.39 mm, submucosa 0.63 mm, and muscularis propria 0.68 mm. The jejunum measures 2.55–2.64 mm, with mucosa measuring 1.40 mm, submucosa 0.68 mm, and muscularis propria 0.47 mm. Wall layering is preserved. No ultrasonographic evidence of intestinal inflammation, ileus, or foreign material is identified.

The colon measures 0.99 mm in the transverse segment and 0.84 mm in the descending segment, with formed fecal material present within the lumen.

Pancreas

The evaluated pancreatic regions do not show ultrasonographic evidence of inflammation or focal pancreatic lesions.

Peritoneal Cavity

No sonographic evidence of abdominal effusion, peritonitis, or lymphadenomegaly is identified. The iliac trifurcation appears normal.

ULTRASONOGRAPHIC FINDINGS

PRIMARY FINDINGS

- Several urinary bladder calculi (3.67–4.89 mm).
- Focal cranial bladder wall thickening and irregularity consistent with cystitis.
- Minimal renal mineral sediment within calyces.

SECONDARY FINDINGS

- Small right renal cortical cyst.
- Mild heterogeneous splenic parenchyma with hyperechoic foci.
- Small hyperechoic hepatic focus.
- Mild biliary sludge.

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Multiple urinary bladder calculi are identified, accompanied by marked focal thickening and irregularity of the cranial bladder wall, findings consistent with chronic cystitis associated with cystolithiasis. These findings correlate with the patient's history of recurrent urolithiasis and previous cystotomies.

No evidence of ureteral obstruction, hydronephrosis, or clinically significant renal urolithiasis is identified. Minimal mineral sediment is present within the renal calyces.

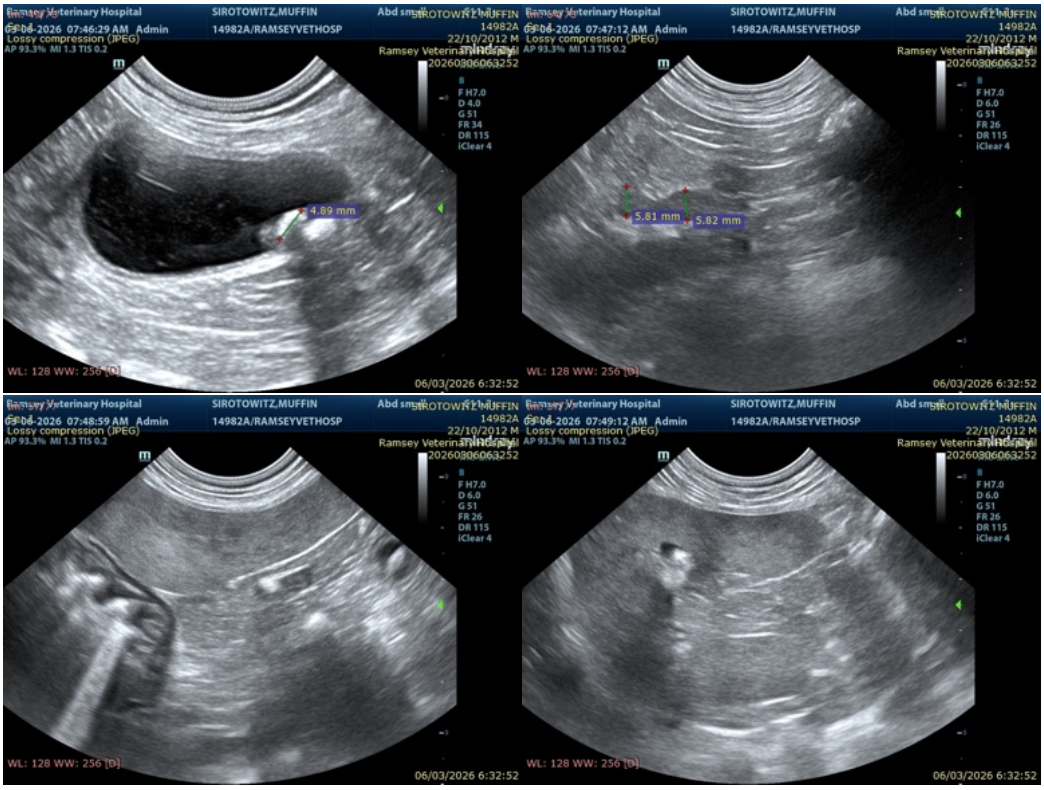
The remainder of the abdominal organs do not demonstrate clinically significant abnormalities. Mild splenic heterogeneity and small hyperechoic hepatic foci are most consistent with benign age-related changes commonly seen in older dogs.

No ultrasonographic evidence of pancreatitis is identified despite the mildly elevated Spec cPL.

Recommendations

• Findings support the clinical plan for surgical management of cystolithiasis. Analysis of removed uroliths is recommended to guide long-term prevention strategies.

• Clinical correlation is recommended regarding the mildly elevated Spec cPL, as ultrasonography may have limited sensitivity for mild or early pancreatitis.



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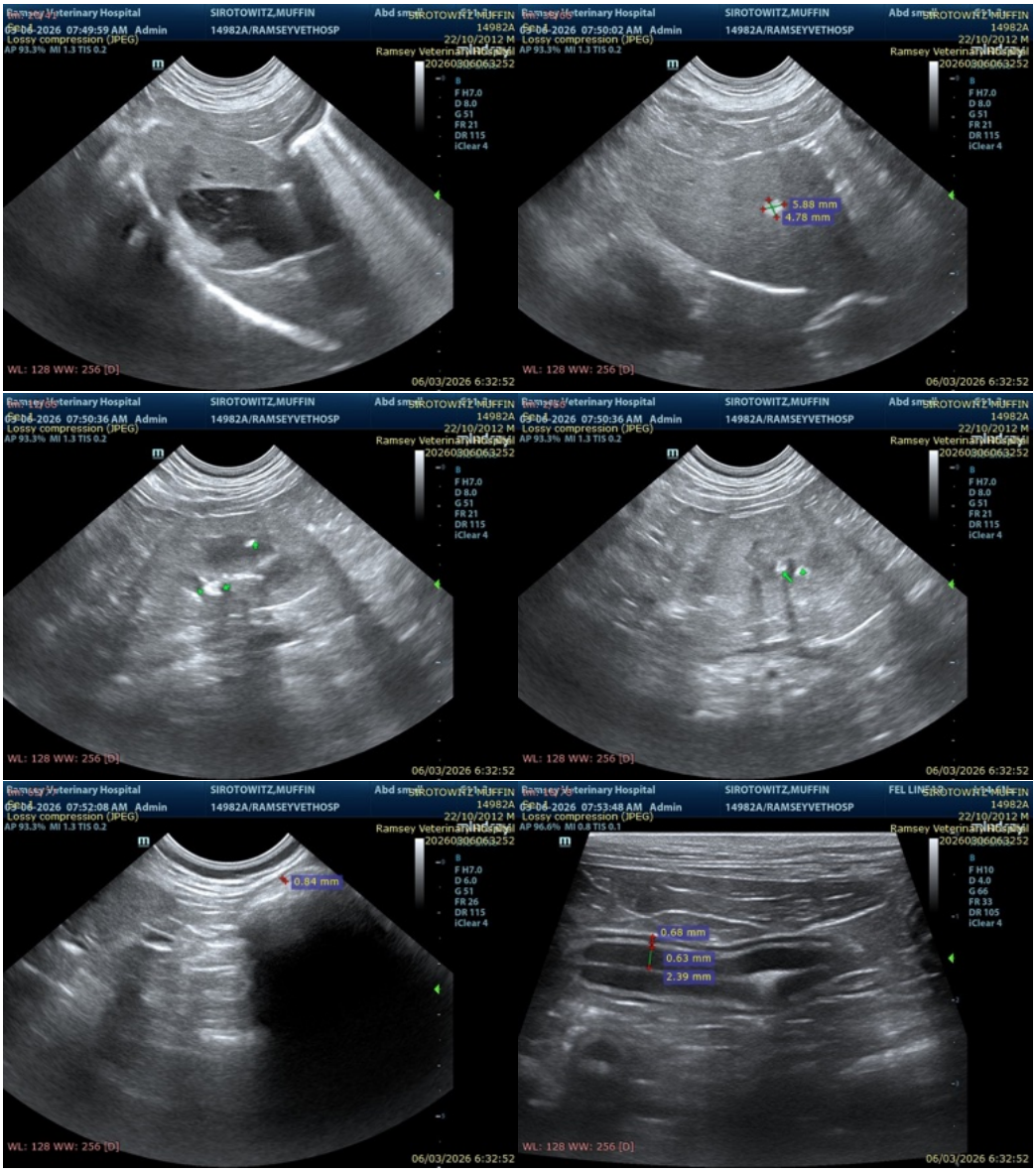

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Alicia Angosto Guerrero, DMV, PgDip, MSc.

MV Esp Ultrasound in Domestic and Wild Animals

info@SonoPath.com