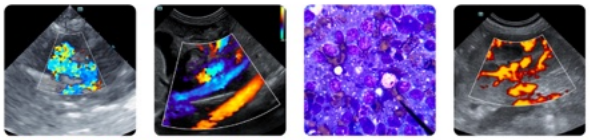


PATIENT

Grr Wilson

SPECIES

Guinea Pig

BREED

Crested

SEX

Male

AGE

4 years

WEIGHT

2.64 lbs

INTERPRETED BY

Dr. Alicia Angosto Guerrero

IMAGING PERFORMED BY

Heidi Putnam, LVT

HOSPITAL NAME

Northwest Exotic Pet Vet

REFERRING VET

Dr. Ramsell

INVOICE

69480

DATE

12/10/25

PRESENTING CLINICAL SIGNS

History: BAR Mild, intermittent stranguria. Suspect urethroliths on radiographs, but not sure about small cluster of tiny radiopacities
Abnormal PE/Chem/CBC/UA Results: BW – WNL

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The bladder lumen is normally distended, and the wall of the urinary bladder appears thin and smooth. The urine is turbid, with sediment or small particulate “sludge” depositing in the bladder and along the proximal urethra. There are no calculi, and no evidence of inflammatory or neoplastic changes.

The left kidney is normal in shape and size: 2.83×1.30 cm, and the cortical thickness is 0.25 cm in the sagittal plane. The right kidney is normal in shape and size: 2.71×1.20 cm, and the cortical thickness is 0.20 cm in the sagittal plane. The cortex is isoechoic compared to the liver parenchyma. The corticomedullary ratio is normal and corticomedullary definition is preserved. Medullary hyperattenuation is visible. There is no evidence of pyelectasia, nephroliths, or hydronephrosis. Doppler color shows a normal pattern.

Seminal Vesicles

The seminal vesicles measure 4.77 and 4.12 mm in thickness, homogeneous, with normal echogenicity.

Adrenal Glands

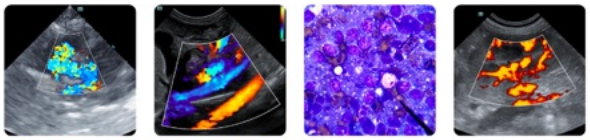
Both adrenal glands show normal shape and echogenicity. The left adrenal gland measures 0.52 cm at the cranial pole and 0.51 cm at the caudal pole. The right adrenal gland measures 0.41 cm at the cranial pole and 0.43 cm at the caudal pole.

Spleen

Partially visualized. Splenic thickness is 0.58 cm. The parenchyma demonstrates normal echogenicity and fine homogeneous echotexture without focal parenchymal abnormalities. The splenic capsule is smooth and regular. Splenic vasculature appears normal.

Liver

The liver is subjectively normal in size, with sharp edges and a regular contour. The liver parenchyma appears uniform and isoechoic compared to the falciform fat, with a normal echotexture. Only a 0.48×0.49 cm hyperechoic focus is observed as an incidental finding. No hepatic lymphadenopathy is observed.



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The gallbladder lumen is normally distended. The wall is thin, and the contents are primarily anechoic. No evident dilation of the cystic duct or common bile duct is observed.

Gastrointestinal

The stomach is empty and folded, with mural thickness (0.85 mm) and preserved wall layering.

Duodenum: 0.65 mm. Jejunum: 0.52 mm. Cecum: 0.48 mm, with normal content.

Colon: with formed feces in the descending segment.

Pancreas

Although the pancreas could not be fully visualized due to acoustic interference from gastric ingesta—an expected limitation in guinea pigs—the surrounding peripancreatic region appeared normal, with no evidence of inflammation or mass effect.

Peritoneal Cavity

No abdominal effusion or peritonitis is observed. Abdominal lymph nodes are not visualized, but the surrounding regions appear unremarkable. The iliac trifurcation is normal.

ULTRASONOGRAPHIC FINDINGS

- Bladder sludge (echogenic sediment) within the bladder and proximal urethra — consistent with lower urinary tract irritation/sludging; no discrete uroliths identified.
- Renal medullary hyperattenuation.
- Incidental hyperechoic hepatic focus (0.48×0.49 cm) — likely benign hyperplasia or focal fibrosis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

This abdominal ultrasound reveals no evidence of cystoliths, urethroliths, or obstructive urolithiasis. However, the bladder contains moderately turbid urine with suspended echogenic sediment (“sludge”), and similar mineralized particulate material is present along the proximal urethra. This finding is very common and clinically relevant in guinea pigs due to their calcium metabolism and predisposition to calcium carbonate crystalluria.

The presence of sediment without discrete calculi explains the patient's intermittent stranguria, as guinea pigs frequently develop sludging cystitis or urethral irritation from abrasive mineral particles. Importantly, sludge can intermittently obstruct the urethral lumen transiently without forming a true stone.

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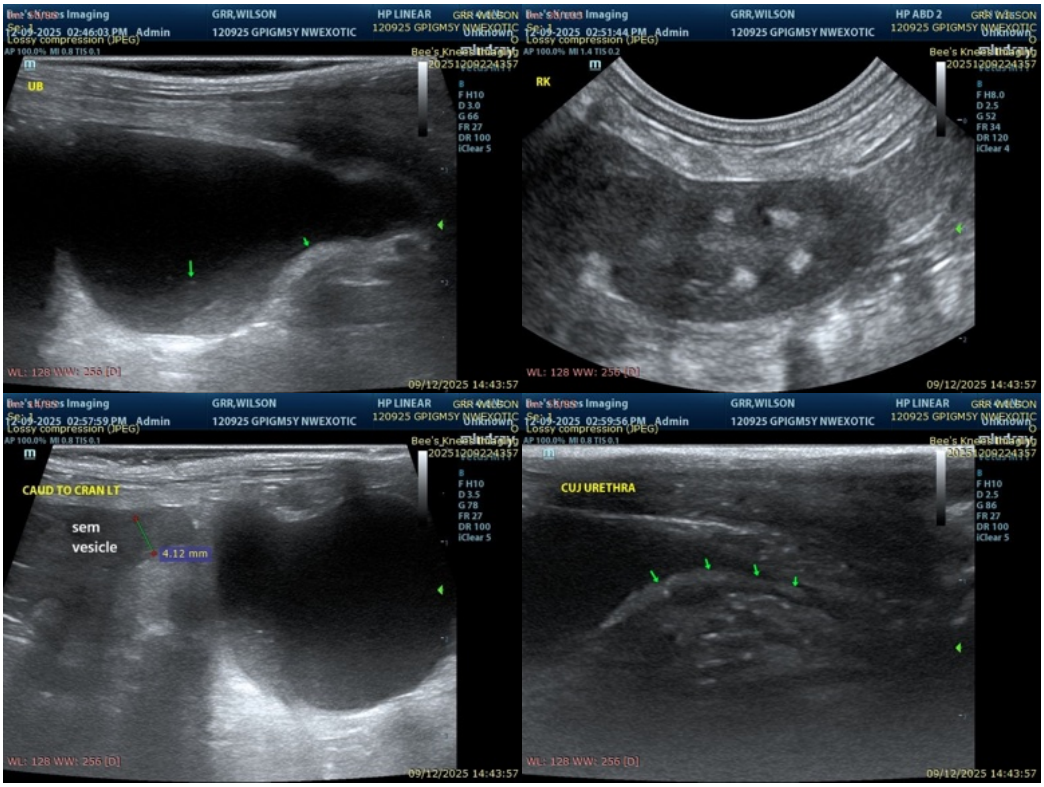
Both kidneys are normal in size and shape with preserved corticomedullary definition. The marked medullary hyperattenuation is a classic, species-typical finding in guinea pigs and most commonly reflects dietary or physiologic calcium deposition, not structural renal disease. There is no pyelectasia, hydronephrosis, nephroliths, or perirenal inflammation.

Recommendations

- Urinalysis with sediment exam
- Fluid intake optimization.
- Dietary review.
- Ongoing monitoring of urinary bladder sludge.



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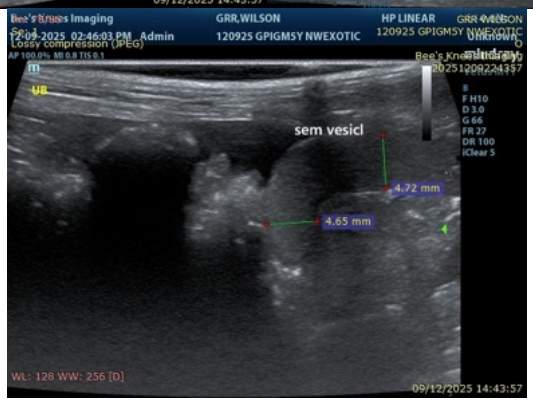

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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