



## PATIENT

Luna Pennella

## SPECIES

Canine

## BREED

Shih Tzu

## SEX

F

## AGE

11

## WEIGHT

20

## INTERPRETED BY

R. McKenzie Daniel,  
DVM, DABVP  
(Canine and Feline)

## IMAGING PERFORMED BY

Jenn

## HOSPITAL NAME

Rockaway Animal  
Hospital

## REFERRING VET

Dr Salazar

## INVOICE

23396

## DATE

01/02/2026

## PRESENTING CLINICAL SIGNS

Hx of seizures Concern for Cushings

Current meds Denamarin 90mg 2 SID Ursodiol 250mg 1/2 SID

Abnormal PE/Chem/CBC/UA Results: ALB 4.1 ALT 186 ALP 1181

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with a small solitary dependent lumen calculus measuring ~ 0.50 cm in diameter. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. Bilateral areas of mild medullary mineral were present. The left kidney measured 4.5 cm in length. The right kidney measured 4.5 cm in length.

The area of the aortic trifurcation was free of pathology.

### *Adrenal Glands*

The caudal pole of the left adrenal gland was normal in size measuring 0.50 cm width. An indistinct mildly expansive non-homogenous hyperechoic nodule was present in the cranial adrenal gland with mild associated symmetrical capsule expansion. The nodule did not exhibit signs of mineralization or vascular invasion. The nodule measured 1.0 cm x 0.75 cm.

The right adrenal gland was normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The right adrenal gland measured 0.5 cm width in the caudal pole.

### *Spleen*

The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

### *Liver/Gallbladder*

The liver presented enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. Normal to adequate vascular volume. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with mild non-organized debris. The cystic and common bile ducts were normal.



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## Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of mechanical/metabolic ileus, obstruction or foreign material.

Normal visible colon wall layers were present with apparent formed feces in lumen.

## Pancreas

The area of the pancreas was sonographically normal.

## Free Abdomen

No evidence of peritoneal effusion was present.

Suspect solitary non-homogenous cystic cranial mesenteric to hepatic lymph node measuring 1.5 cm x 0.75 cm.

## ULTRASONOGRAPHIC FINDINGS

### Primary

- Small urinary bladder calculus
- Age related renal changes with mild medullary mineral.
- Mildly enlarged indistinctly nodular cranial left adrenal gland- hyperplasia, lipogranuloma, functional vs non-functional adenoma, emerging left adrenal tumor less likely yet not excluded.
- Hepatopathy exhibiting adequate vascular volume
- Mild non-organized gallbladder debris
- Suspect probable cystic cranial mesenteric / hepatic lymph node- subjective benign

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Further assessment of the liver may include assuming normal clotting status, FNA cytology +/- bile acid profile given history of seizures. Adrenal workup indicated if clinical signs consistent with Cushing's syndrome are present in conjunction with decreased USG.

Continued hepatosupportive medications are recommended. Correlation with three view chest radiographs and neurological examination is recommended.



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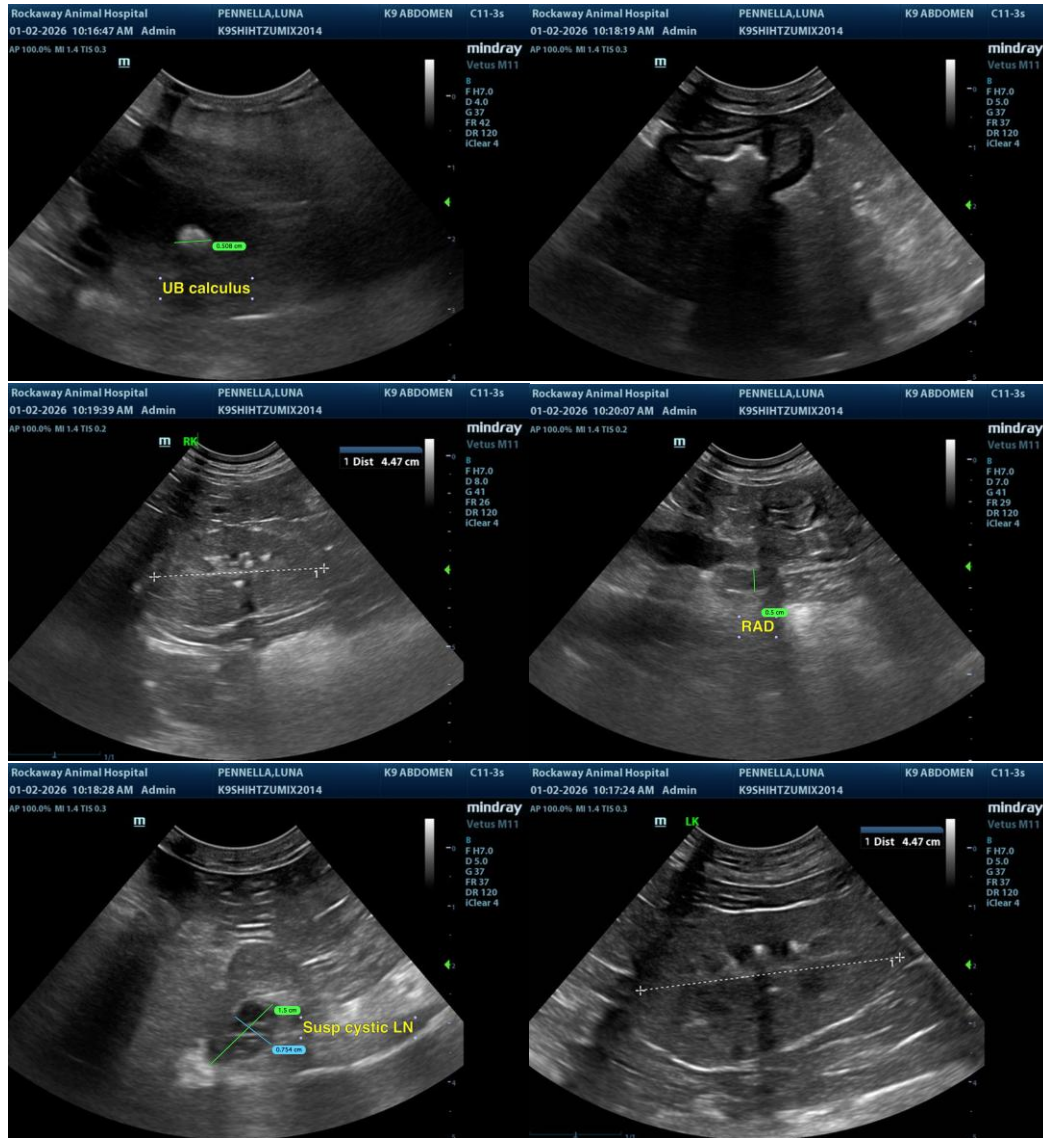
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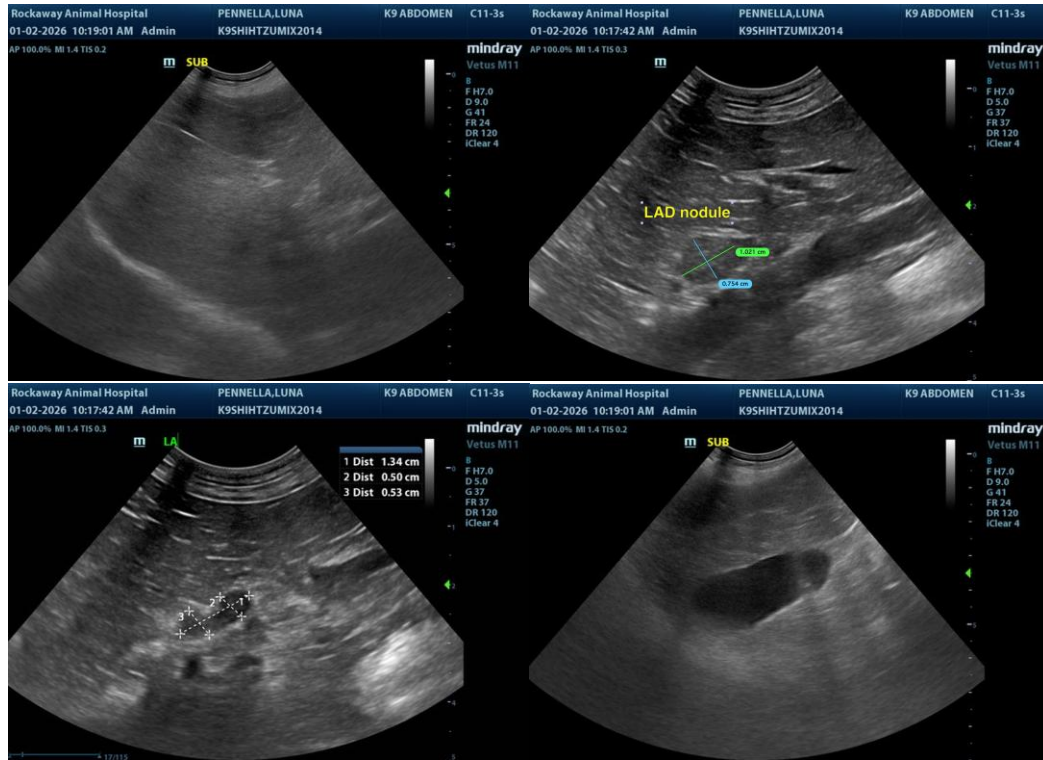
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine/Feline Practice)  
[info@sonopath.com](mailto:info@sonopath.com)