

## PATIENT

Willow Rivas

## SPECIES

Canine

## BREED

Shih Tzu

## SEX

Spayed female

## AGE

9 years

## WEIGHT

14.3 lbs

## INTERPRETED BY

Alicia Angosto  
Guerrero, DMV,  
PgDip, MSc.

## IMAGING PERFORMED BY

Mayra Sanchez

## HOSPITAL NAME

Sunset AH

## REFERRING VET

Dr. Sanchez

## INVOICE

73969

## DATE

3/31/26

## PRESENTING CLINICAL SIGNS

- Progressively increasing ALP even with Denamarin tx
- Patient also panting more than normal
- Owner reports no PU/PD
- PE: BCS 7/9, slight pot-bellied appearance; dental disease Chem: ALP 1267 Fecal: Hookworm +

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The urinary bladder is normally distended, with a thin, smooth wall. The urine is predominantly anechoic with scant suspended echogenic material. The bladder neck and proximal urethra appear normal. No calculi or evidence of inflammatory or neoplastic changes are identified.

The left kidney is normal in shape and size (4.38×1.95 cm), with a cortical thickness of 0.38 cm in the sagittal plane. The cortex is isoechoic compared to the liver parenchyma. The corticomedullary ratio is within normal limits, and corticomedullary definition is preserved. Mild pyelectasia is present (2.63 mm), without nephrolithiasis or hydronephrosis.

The right kidney is normal in shape and size (4.36×2.43 cm), with a cortical thickness of 0.31 cm in the sagittal plane. The cortex is isoechoic compared to the liver parenchyma. The corticomedullary ratio is within normal limits, and corticomedullary definition is preserved. Mild pyelectasia is present (1.67 mm), without nephrolithiasis or hydronephrosis.

### Adrenal Glands

Dorsoventral diameters measured in the sagittal plane: The left adrenal gland measures 0.60 cm at the cranial pole and 0.72 cm at the caudal pole. The right adrenal gland measures 0.82 cm at the cranial pole and 0.59 cm at the caudal pole.

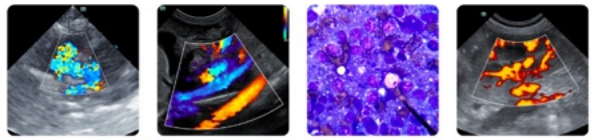
### Spleen

Splenic thickness is 1.14 cm. The parenchyma demonstrates normal echogenicity and fine homogeneous echotexture without focal parenchymal abnormalities. The splenic capsule is smooth and regular.

### Liver

The liver is subjectively normal in size, with sharp edges and a regular contour. The liver parenchyma looks uniform and isoechoic compared to the falciform fat, with a normal echotexture. No hepatic lymphadenopathy is observed.

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.



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## *Gastrointestinal*

The stomach is empty and folded, with a wall thickness of 1.93 mm and preserved layering.

Pylorus: 5.65 mm. Duodenum: 2.90–3.24 mm. Jejunum: 2.87 mm. Wall layering is preserved throughout. No evidence of inflammation, ileus, or foreign material is identified.

Colon: 0.92 mm, with formed feces in the descending segment.

## *Pancreas*

The evaluated pancreatic areas do not show evidence of overt inflammation or neoplastic disease.

## *Free Abdomen*

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

## PRIMARY FINDINGS

- Bilateral adrenal enlargement

## SECONDARY FINDINGS

- Mild bilateral pyelectasia

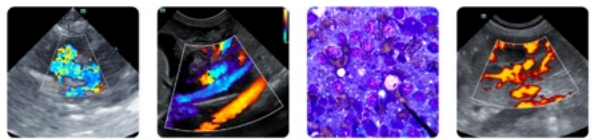
## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Both adrenal glands are enlarged relative to expected reference ranges for a dog of this size (generally  $\leq 0.54$ – $0.60$  cm), with preserved morphology. This pattern is most consistent with bilateral adrenal hyperplasia.

While ultrasonography does not assess adrenal function, the bilateral nature of the enlargement, in the context of compatible clinical signs (panting, abdominal contour changes) and marked ALP elevation, makes pituitary-dependent hyperadrenocorticism a likely consideration.

Despite the marked elevation in ALP, there is no ultrasonographic evidence of structural hepatic disease. These findings are most consistent with enzyme induction and/or early vacuolar hepatopathy, which may precede more overt ultrasonographic changes.

Mild bilateral pyelectasia (2.63 mm left, 1.67 mm right) is noted. These measurements are slightly above typical reference ranges ( $< 2$  mm) but are symmetrical and without associated ureteral dilation or obstruction, making this finding most likely incidental or related to hydration status.



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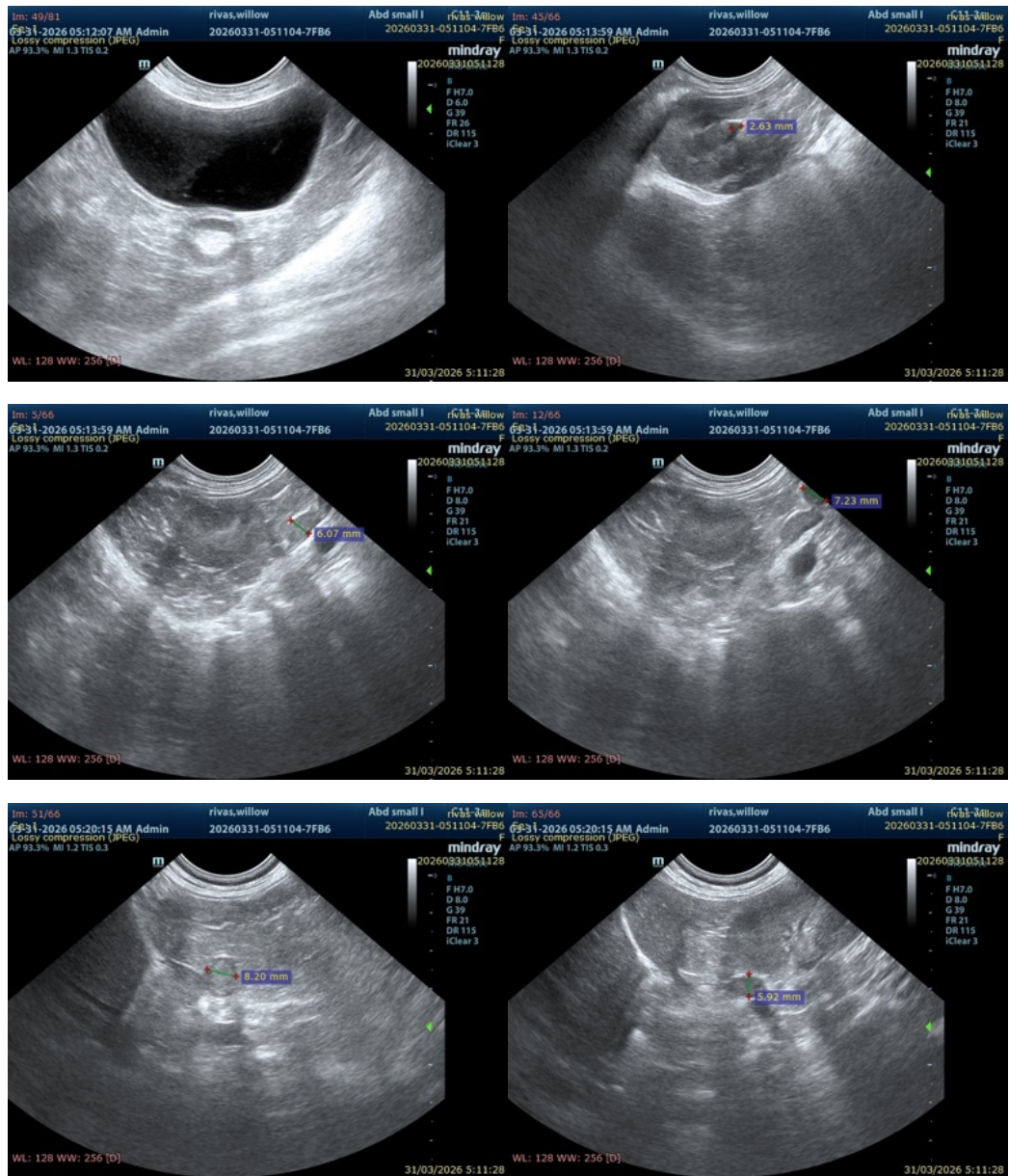
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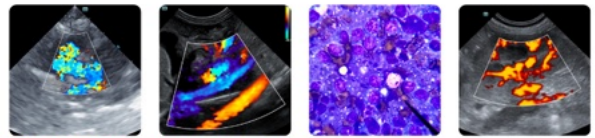
3/31/26

**Recommendations**

- Endocrine testing to confirm hyperadrenocorticism.
- Correlate with serum biochemistry, particularly liver enzyme trends.

Final diagnostic and therapeutic decisions should be made by the attending veterinarian, who can best integrate these findings with the patient's clinical status.





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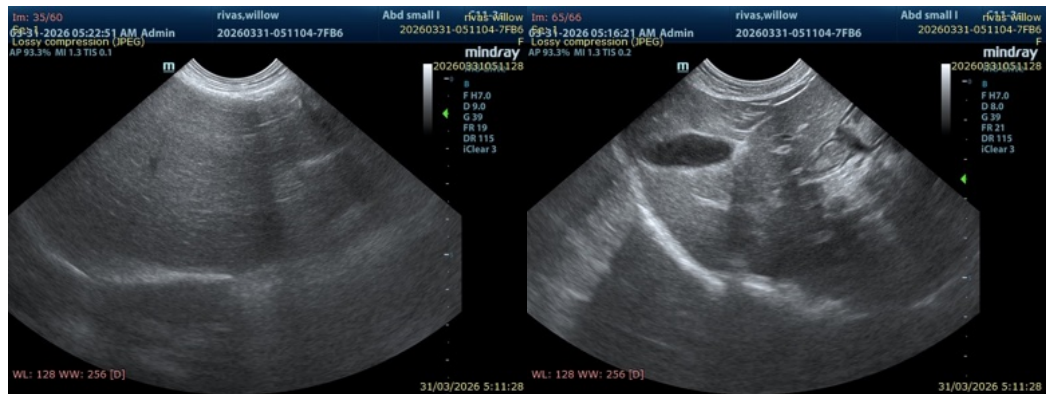
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Alicia Angosto Guerrero, DMV, PgDip, MSc.

[info@SonoPath.com](mailto:info@SonoPath.com)