



## PATIENT

Libby Cooke

## SPECIES

Canine

## BREED

Shih Tzu

## SEX

Female Spayed

## AGE

16y

## WEIGHT

3.9 kgs

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Dr. Judy MacFarlen

## HOSPITAL NAME

Westview VH

## REFERRING VET

Dr. Judy MacFarlen

## INVOICE

13124

## DATE

1/23/26

## PRESENTING CLINICAL SIGNS

### History:

- Had an ultrasound on September 23, 2025, with Dr. Brian Barnes. She has a history of being thin with no obvious reason. Previous blood work showed mild elevation in BUN, creatinine, and ALT. Ultrasound findings included age-related renal changes with bilateral pyelectasia, a mildly thickened apical wall of the urinary bladder, chronic pancreatic remodeling, hepatopathy with neoplasia unlikely, and moderate gallbladder debris. New blood work reveals mild anemia, elevated urea, and elevated lipase.

Abnormal PE/Chem/CBC/UA Results: Mild anemia (red cell count  $4.25 \times 10^{12}/L$ , hematocrit 27.9%, hemoglobin 10.1 g/dL) \* Elevated urea (10.7, normal 2.5-9.6) \* Elevated lipase (2.592, normal 200-1800) \* History of elevated BUN, creatinine, and ALT Urea 12.1 (N 2.5-9.6) Previous 11.5, 15.3 Creat 86 (N 44-159) Previous 100, 115 ALT 190 (N 10-125) Previous 154, 98 Prior wt 4.2 kg, current 3.9 kg Patient is spunky

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The urinary bladder exhibited uniformly, mild thickened urinary bladder wall isoechoic to the adjacent normal urinary bladder wall. The luminal margin of the thickened urinary bladder wall was mildly asymmetrical in contour. Apical urinary bladder wall measured 0.36 cm. Mineralization or echogenic foci within the thickened areas of urinary bladder wall was not present. The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra exhibited normal tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. The visible proximal urethra to a depth of 3.0 cm exhibited normal thickness and tone.

Normal renal size with asymmetrical margination was present in both kidneys. The renal cortex presented uniformly increased in echogenicity with uniform echotexture. The renal cortex appeared to be hypertrophied resulting in an altered cortex: medulla ratio. Mild indistinct loss of corticomedullary distinction was also present. The renal medullary volume was subjectively reduced. Mild left kidney pyelectasia present. The left kidney measured 3.3 cm in length. The right kidney measured 3.4 cm in length.

### Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.40 cm width at the caudal pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.47 cm width at 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.



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## Liver

The liver was subjectively normal in size, structure, and contour with normal vascular volume. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild parenchymal remodeling. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non distended in size with mild, non-organized, echogenic, nonmineralized biliary sludge. The cystic duct and common bile ducts were normal without evidence of dilation.

## 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 ileus, obstruction or foreign material.

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

## Pancreas

The pancreas was normal in size and contour with heterogeneous, mildly hyperechoic parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.

## Free Abdomen

No overt lymphadenopathy or peritoneal effusion was present.

## ULTRASONOGRAPHIC FINDINGS

- Mild cystitis pattern
- Static chronic renal changes with mild left kidney pyelectasia
- Mild benign hepatopathy
- Static non-organized gallbladder debris (non-mucocele)
- Mildly hyperechoic remodeled pancreas – patient variant, remodeling and possible mild fibrosis owing to previous inflammation or chronic pancreatitis possible
- Sonographically normal gastrointestinal tract

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Similar sonographic findings compared to the previous study without evidence of significant progressive pathology. A GI panel to include PLI/TLI/Cobalamin/Folate to correlate with pancreas and assess for non-structural intestinal disease given reported decreased body condition may be considered. Recheck urinalysis, +/- renal staging to include screening C/S or UPC level if non-inflammatory proteinuria may be considered. Mild CKD therapy and as needed supportive care for potential chronic pancreatitis if gastrointestinal signs may be considered.



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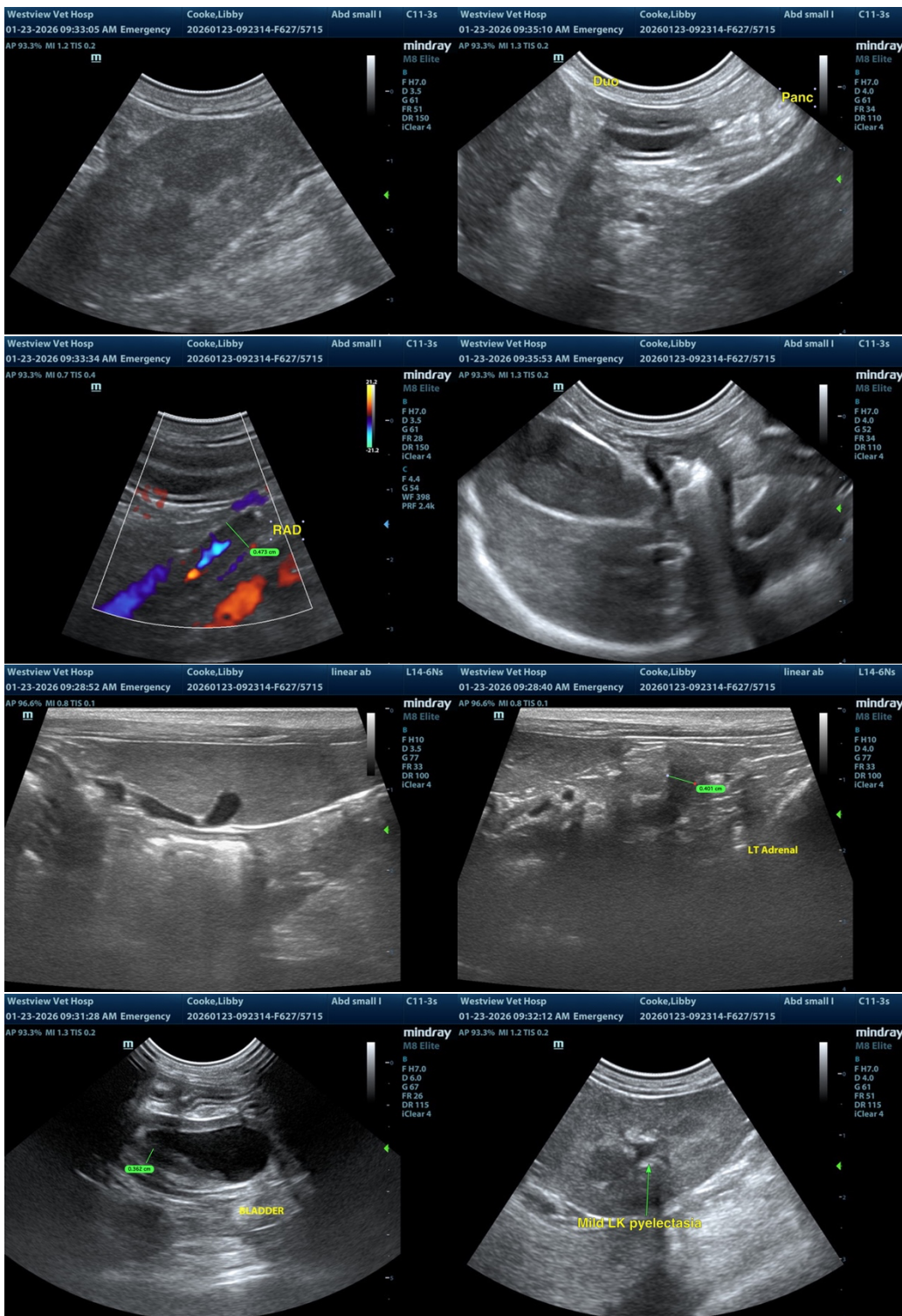
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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)

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