



## PATIENT

Grannie Vach

## SPECIES

Canine

## BREED

Chihuahua Terrier Mix

## SEX

FS

## AGE

14yr

## WEIGHT

16.8kg

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Patti Mayfield, DVM

## HOSPITAL NAME

Broken Top Veterinary  
Clinic

## REFERRING VET

Terra McSwain, DVM

## INVOICE

24286

## DATE

03/24/2026

## PRESENTING CLINICAL SIGNS

No reported complaints from client Pre-anesthetic COHAT blood work revealed significant abnormalities

Abnormal PE/Chem/CBC/UA Results: Physical exam: - Distended abdomen, pot-bellied appearance with alopecia on the ventral abdomen Senior Screen: CBC: - PLT = 448,000 (H) CHEM: - Cl: 107 (L) - ALT: 967 (H) - ALP: 669 (H) - AST: 127 (H) - CHOL: 475 (H) - LIPA: 289 (H) UA: 1+ proteinuria 4DX: NEG Fecal: NEG T4/ft4: WNL

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no evidence of urine/lumen sediment, mineral, or calculi. 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 mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. Bilateral areas of medullary mineral were present. The left kidney measured 5.7 cm in length. The right kidney measured 5.7 cm in length.

The area of the aortic trifurcation was free of pathology.

### Adrenal Glands

A non-homogenous, variably hyperechoic nodule was present in the mid cranial left adrenal gland with mild associated symmetrical capsule expansion. The nodule did not exhibit signs of mineralization or vascular invasion. The nodule measured 1.9 cm x 1.6 cm. The left adrenal gland overall measured 0.96 cm width at the caudal pole and 3.2 cm length.

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 0.60 cm width at the caudal pole.

### Spleen

The spleen exhibited primarily finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Multiple to coalescing well-defined, symmetrical, echogenic nodules were present throughout the medial 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 or neoplastic changes were not noted. The echogenic nodules tend to trend benign and are most consistent with benign hyperplasia or myelolipomas.

### Liver/Gallbladder

Generalized hepatomegaly. The liver parenchyma was moderately nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective moderate parenchymal remodeling. The hepatic and portal vasculature were normal in appearance without signs of congestion. Normal



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vascular volume. The gallbladder was non-distended in size with normal walls and moderate irregular congealed potentially emerging mineralized, gravity dependent gallbladder debris. No evidence of gallbladder/peripheral gallbladder inflammation or wall edema was present. The common bile duct was not visualized without overt evidence of dilation or post hepatic obstructive criteria.

## SPECIES

Canine

### *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.

## BREED

Chihuahua Terrier Mix

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.

## SEX

FS

### *Pancreas*

The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. Potential for left limb pancreatic cysts or possible cystic lymph nodes.

## AGE

14yr

### *Free Abdomen*

No overt lymphadenopathy was present.

Scant perihepatic effusion around the cranial liver.

## WEIGHT

16.8kg

Generalized normal omental echogenicity was present.

## ULTRASONOGRAPHIC FINDINGS

### *Primary*

- Enlarged non-homogenous non-congested liver
- Congealed, variably hyperechoic to emerging mineralized gallbladder debris -potential for gallbladder polyp or emerging cholelith, gallbladder mass thought less likely
- Multiple to coalescing hyperechoic splenic nodules - suggestive of benign criteria, i.e. myelolipomas
- Chronic renal changes
- Bilateral adrenomegaly with left adrenal nodule- hyperplasia, functional vs non-functional adenomatous change, emerging left adrenal tumor or combination possible
- Pancreatic remodeling with potential for left pancreatic limb cyst vs adjacent cystic lymph nodes - subjective benign

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## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Adrenal work up with LDDST is recommended if clinical signs consistent with Cushing syndrome are present. Serial monitoring of systemic BP for hypertension +/- urine metanephrine level if hypertension is present is recommended. Assuming normal clotting status, screening hepatic FNA cytology could be considered. Chronic pancreatitis may be suspected if cranial abdomen/subxiphoid discomfort on palpation or gastrointestinal signs. Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered.

Sonographic monitoring of the adrenal glands and gallbladder indicated with hepatosupportive



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medication and clinical monitoring.

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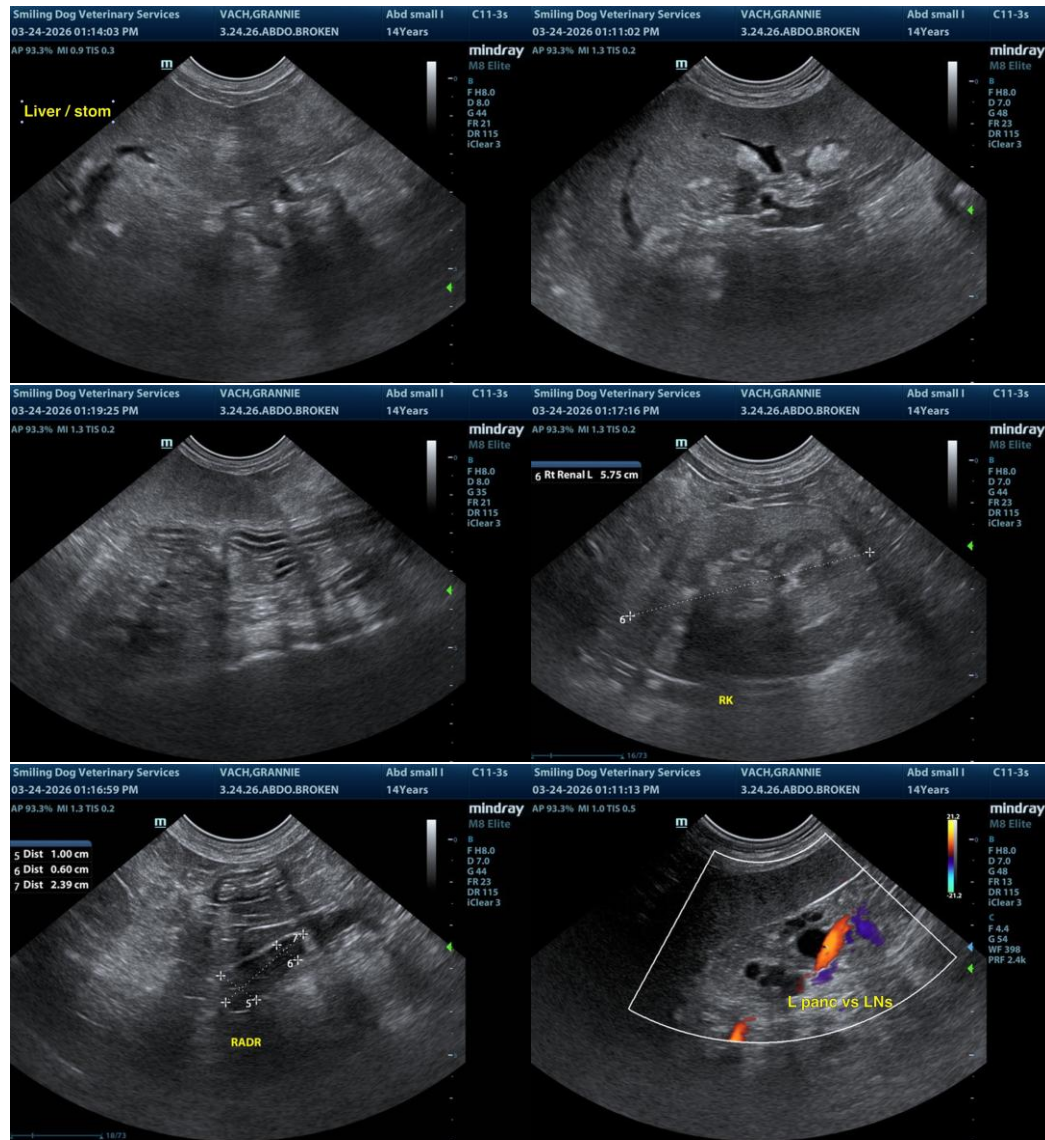
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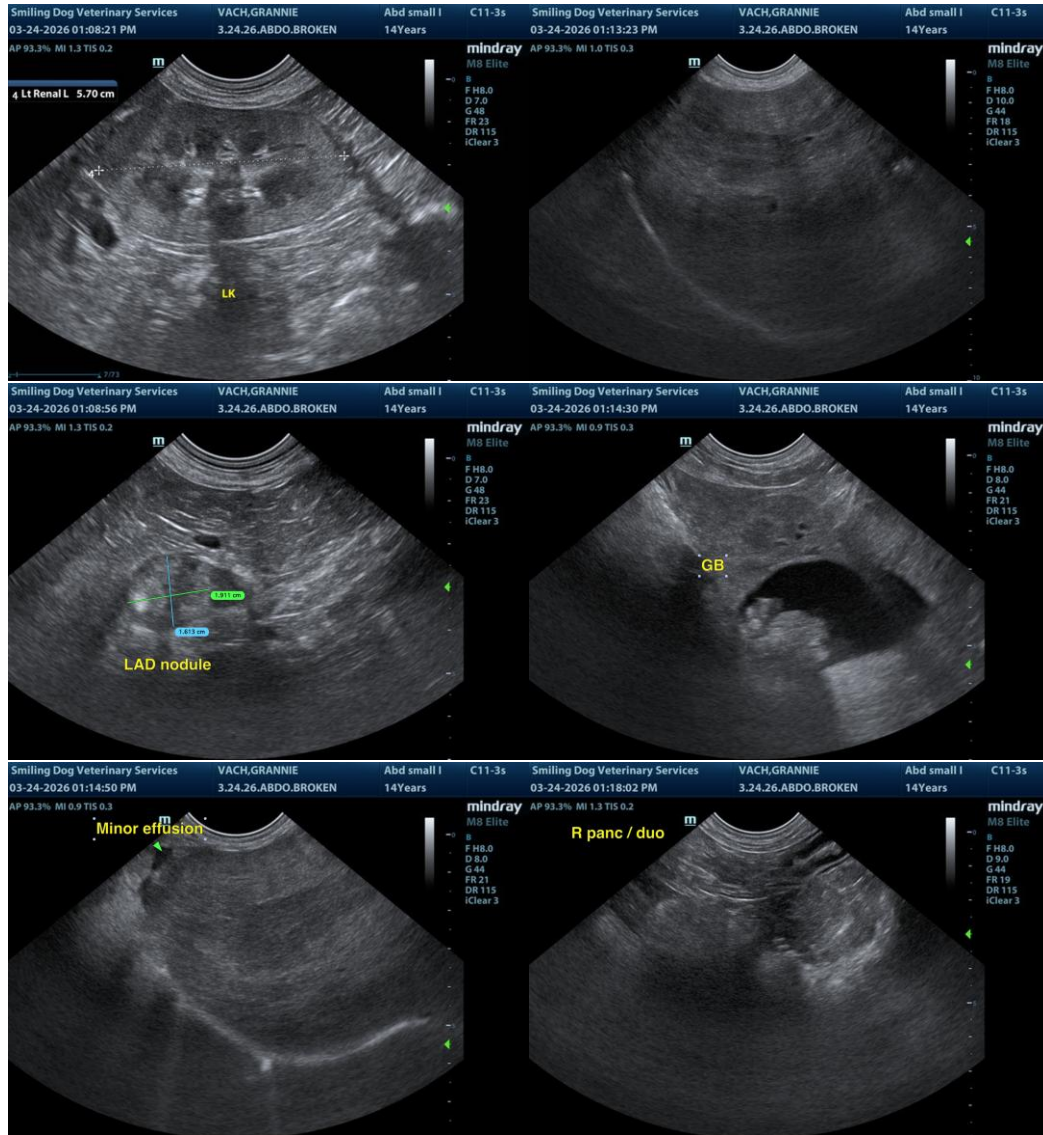
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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