



**PATIENT**

Lulu Kofhal

**SPECIES**

Canine

**BREED**

Dachshund

**SEX**

FS

**AGE**

10yr

**WEIGHT**

11.4lb

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Sara Hansen

**HOSPITAL NAME**

Banfield Salem

**REFERRING VET**

Dr Alger

**INVOICE**  
 23901

**DATE**  
 02/16/2026

**PRESENTING CLINICAL SIGNS**

- ABNORMAL Labwork Values
- Bloodwork 1/4/2026: IOF- ALKP 276 U/L High (23-212), ALT 155 U/L High (10-125), CHOL 441 mg/dl High(110-320), GGT 62U/L High (0-11)
- Current Medications Denamarin liver supplement
- Radiographic FindingsNone available.
- Notes to Specialist (if any)None.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra 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. The left kidney measured 4.7 cm in length. The right kidney measured 4.9 cm in length.

The area of the aortic trifurcation was free of pathology.

**Adrenal Glands**

A well-defined, hyperechoic nodule was present in the mid to caudal left 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 0.7 cm. The left adrenal gland measured 2.3 cm length and 0.86 cm width at the caudal pole. A subtle parenchymal notch, possibly suggestive of early parenchymal expansion or vascular invasion was present at the level of the left phrenic vein.

A well-defined, hyperechoic nodule was present in the right adrenal gland occupying the majority of the right adrenal parenchyma with mild associated symmetrical capsule expansion. The nodule did not exhibit signs of mineralization or vascular invasion. The nodule measured 1.7 cm x 1.2 cm in diameter. The right adrenal gland measured 2.0 cm x 1.4 cm.

**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 mildly 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. The hepatic and portal vasculature were normal in appearance without signs of



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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**

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The stomach presented intact wall layering with a normal wall layer ratio. The stomach was non-distended containing mild retained fluid and a well demarcated strongly shadowing curvilinear echo measuring 1.2 cm in diameter.

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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.

Dachshund

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

**Pancreas**

**SEX**

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

FS

**Free Abdomen**

**AGE**

No omental masses, overt lymphadenopathy or peritoneal effusion was present.

10yr

**ULTRASONOGRAPHIC FINDINGS**

**WEIGHT**

**Primary**

11.4lb

- Benign hepatopathy pattern
- Mild gallbladder debris
- Bilateral nodular adrenomegaly- adrenal hyperplasia, functional vs non-functional adenomas, unilateral/ bilateral emerging adrenal tumors with potential for early left phrenic vein invasion possible
- Possible mild chronic pancreatitis / fibrosis
- Non-specific shadowing gastric lumen echo and mild retained fluid – ingesta, treat, medication, possible small non-obstructive gastric foreign body possible

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**Secondary**

- Age-related renal changes

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Serial blood pressure measurements are warranted. If hypertension is present i.e. systolic pressure >160 then urine metanephrine level is indicated to assess for pheochromocytoma. If the patient appears Cushingoid then work-up for adrenal dependent Cushing's is indicated. CT evaluation would be ideal primarily to assess for possible early left vascular invasion vs serial sonographic monitoring.

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Assuming normal clotting status, hepatic FNA cytology could be considered primarily to assess for evidence of inflammation. Hepatosupportive medications and monitoring would be more conservative.

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A spec CPL suggested if non-reported clinical signs which may suggest chronic pancreatitis. Correlation with most recent meal, treat or medication ingestion recommended. If documented NPO and given time frame between ultrasound and interpretation, 12 hour fast and sonographic

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reassessment of the stomach may be considered.

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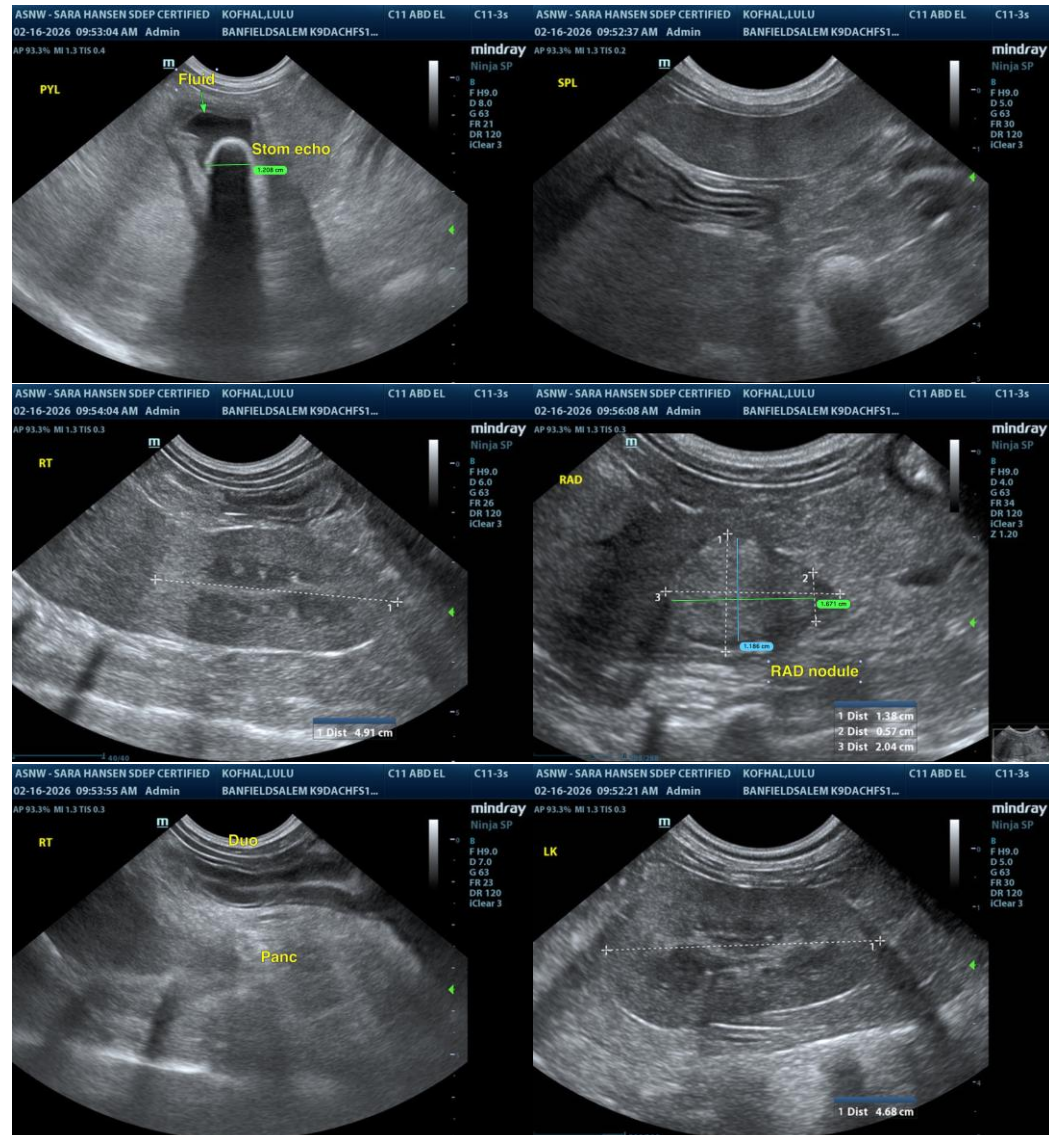
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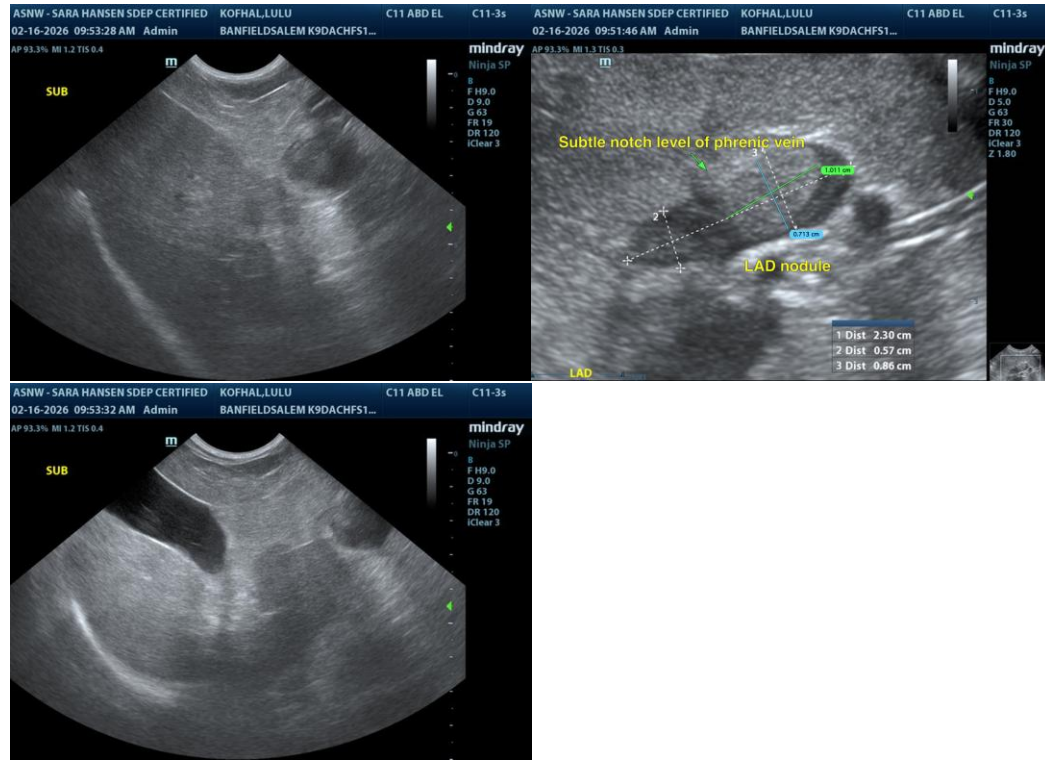
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

**IMAGING PERFORMED BY**

Sara Hansen

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

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