



**PATIENT**

Gracie Berger

**SPECIES**

Canine

**BREED**

Dachshund

**SEX**

FI

**AGE**

12yr

**WEIGHT**

7.5kg

**PRESENTING CLINICAL SIGNS**

Vomiting for 24 hours, lethargic. Historical dietary indiscretion though nothing known recently. Blood 'spotting' vaginal discharge for 4 days consistent with prior heat cycles, 6 months since last estrus.

Abnormal PE/Chem/CBC/UA Results: Painful on imaging right ovarian region. Temp 102.4F (previous visit was 101F). 4 mammary masses, largest is 3.5cm CBC - leukocytosis neut 23k, hct 33%, plt 512k Chem - glob 5.2 UA - USG , TNTC rbc and rods Abd radiographs - ingesta in stomach with 'gravel sign' small radiopaque mineral opacities in pylorus, no intestinal distension Chest radiographs - no metastases

**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 minor non-dependent particulate sediment. The sediment may indicate cellular debris / protein, crystalline debris, lipid, or mucus. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were 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 moderate loss of corticomedullary symmetry and definition expected for the age of the patient. Mild right kidney pyelectasia was present. The left kidney measured 5.4 cm in length. The right kidney measured 4.6 cm in length.

The area of the aortic trifurcation was free of pathology.

The area of the iliac trifurcation was free of pathology including no evidence of medial, iliac or sublumbar lymphadenopathy/masses.

The uterus was subtly prominent in size exhibiting mild prominent walls including multiple circular hyperechoic to anechoic structures within the uterine wall. No evidence of uterine distention with luminal fluid. The uterine body measured 1.1 cm in diameter. Both ovaries were subjectively normal in size with mild non-homogenous to cystic parenchyma. No evidence of ovarian neoplastic criteria. The left ovary measured 1.9 cm; the right ovary measured 2.0 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 0.46 cm width at the caudal pole and 0.51 cm width at the cranial pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.41 cm width at the caudal pole and 0.47 cm width at the cranial 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**

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Anna Wepprich

**HOSPITAL NAME**

Wilvet Salem

**REFERRING VET**

Anna Wepprich

**INVOICE**

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The liver presented borderline enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. A solitary small thinly walled cyst was present in the mid cranial liver. 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 congestion. The gallbladder was non-distended in size with primarily anechoic luminal content. The cystic and common bile ducts were normal.

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**Gastrointestinal**

**BREED**

Dachshund

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.

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

**Pancreas**

**AGE**

12yr

The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum, likely consistent with age related changes and considered incidental. No signs of active inflammation or neoplasia.

**Free Abdomen**

**WEIGHT**

7.5kg

No omental masses or overt lymphadenopathy was present.

Very scant caudal abdominal free fluid.

**ULTRASONOGRAPHIC FINDINGS**

**INTERPRETED BY**

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

- Cystic endometrial hyperplasia uterus pattern-no overt pyometra or neoplastic criteria
- Bilateral mild cystic ovaries
- Sonographically unremarkable GI tract-probable mild gastroenteritis
- Chronic renal changes with mild right kidney pyelectasia
- Minor urinary bladder sediment
- Heterogenous pancreas- may indicate patient/ age variant, remodeling owing to previous inflammatory episode or mild to chronic pancreatitis possible

**IMAGING PERFORMED BY**

Anna Wepprich

**Secondary findings**

**HOSPITAL NAME**

Wilvet Salem

- Focal benign hepatic cyst

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**REFERRING VET**

Anna Wepprich

The right kidney pyelectasia may be owing to chronic renal changes, potential pelvic scarring possibly owing to previous calculi passage, IV fluid therapy (if applicable). Urine C/S and protein: creatinine ratio on sterile urine sample is recommended.

Cytology +/- C/S of vaginal discharge could be considered.

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The pancreas was non-specific and may indicate patient/ age variant, remodeling owing to previous inflammatory episode or mild to chronic pancreatitis possible. This potential may be considered if there is evidence of cranial abdominal or subxiphoid discomfort on palpation. Correlation with a spec cPL or a GI panel to include PLI/TLI/Cobalamin/Folate is recommended.

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No obvious evidence of neoplastic criteria. Sonographic reassessment of the uterus recommended if persistent/progressive vaginal bleeding. As needed GI support is suggested.

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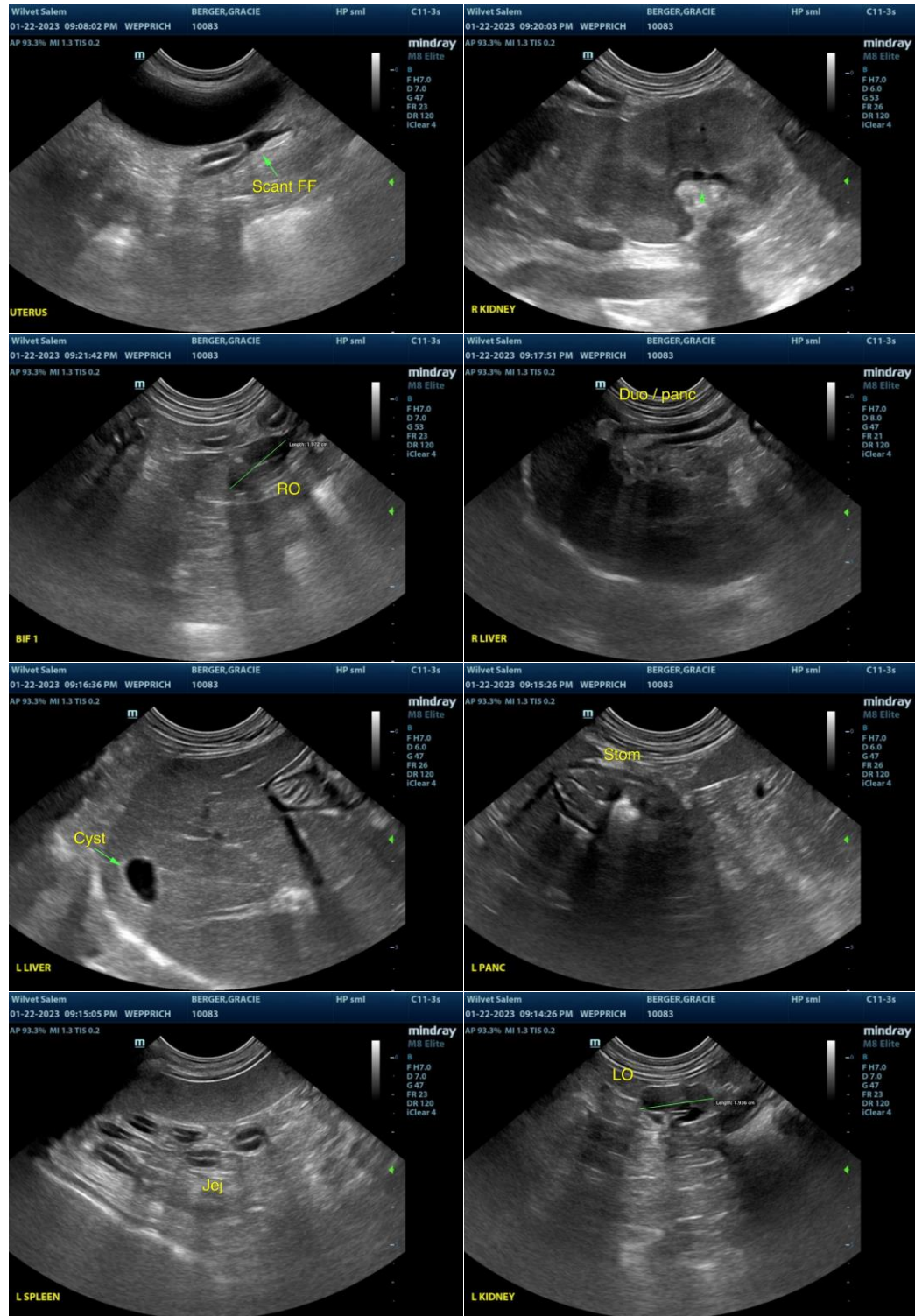
Anna Wepprich

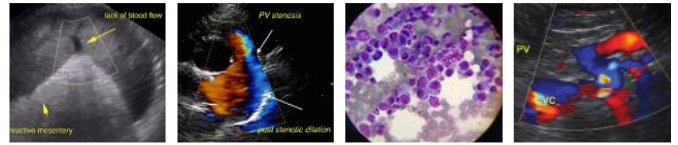
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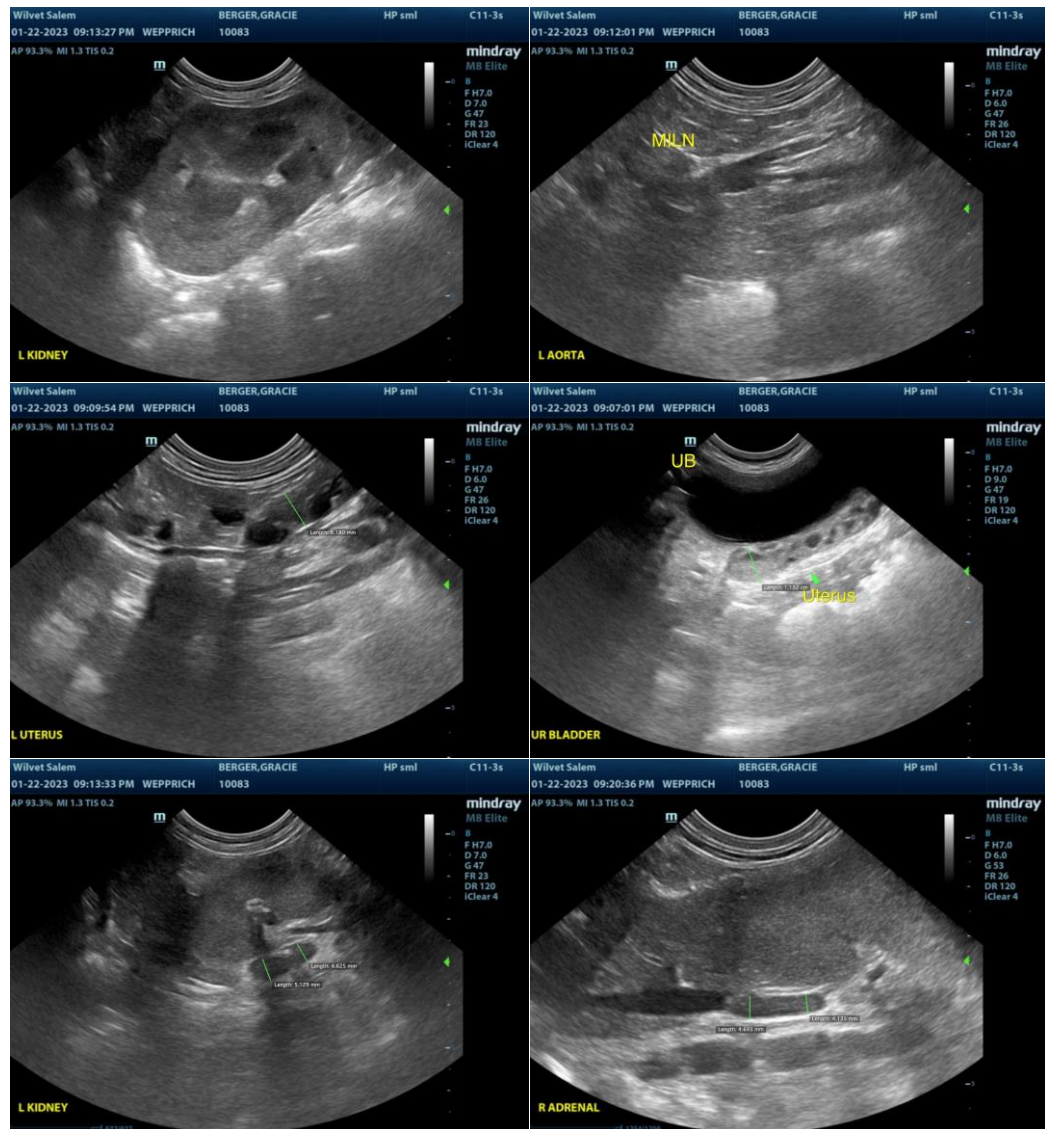
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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