



**PATIENT**

Biermann Brynn

**SPECIES**

Feline

**BREED**

DLH

**SEX**

Spayed Female

**AGE**

7 Years

**WEIGHT**

3.46

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Anna Wepprich

**HOSPITAL NAME**

Wilvet Salem

**REFERRING VET**

Dr. Anna Wepprich

**INVOICE**

45852

**DATE**

3/12/23

**PRESENTING CLINICAL SIGNS**

Presented 3/11 day for vomiting for a few days and losing weight for a few months. Dull, dehydrated, lateral on presentation Bar this morning, wants pets. Ate well after Ultrasound.

Abnormal PE/Chem/CBC/UA Results: CBC - HCT 46.9%, WBC 30.87\*, Neut 14.77\*, bands suspected, Lym 14.08\*, Mono 1.98\*, Plt 598 Chem 17 - Glu 259\*, Creat 0.7\*, BUN 39\*, Phos 7.1, Ca 8.8, TP 7.5, ALB 3.3, Glob 4.2, ALT 201\*, ALP 66, GGT 0, bili 0.6, chol 106 EPOC - pH 7.420, BE -5.1, Na 154, K 3.4\*, Cl 125, Ca 1.02, Lact 1.68, BUN 41\*, Creat 0.88, Glu 272\*, HCT 42% FpL - 8.4 ng/mL - consistent with pancreatitis T4 - 5.4 - consistent with hyperthyroidism UA - USG 1020, pH 6, Pro 30\*, glu/ket neg, blood 25, bili neg, WBC 46/hpf, RBC <1/hpf, rods present, no crystals/casts 3 v full body rads - submit stat - CONCLUSIONS: 1) Segment of small intestine that is slightly widened and contain stippled or heterogenous soft tissue opacity material or mixed fluid and gas may represent segmental enteritis. A mural infiltrate is also differential. An intraluminal foreign body is also possible. 2) Incidental degenerative changes of the spine. 3) The conglomerated pinpoint mineral opacities noted on lateral views may represent small, mineralized granulomas associated with suture material from previous ovariohysterectomy. 4) Normal thorax. RECOMMENDATIONS: Screening blood work is indicated. If lab work results do not explain clinical signs, abdominal ultrasound may be necessary. AFAST - no free fluid, no obvious masses \_BAR, interactive. MM light pink and moist CRT < 2 seconds. Eyes and ears clean and clear, missing most teeth. Heart rate and rhythm regular. Eupneic with normal BV. Abdomen is soft and not painful on palpation. 0-3 % dehydrated. Seems a little sensitive to neck palpation but no obvious masses. Ambulatory on all four limbs and appears neurologically appropriate at this time. Unkempt appearance with mats on hind leg/abdomen. Thin BCS and diffuse muscle atrophy Dehydration, vomiting, hyporexia, weight loss, azotemia Suspect Pancreatitis, pyelonephritis, hyperthyroidism.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 cm exhibited normal thickness and tone. Primarily anechoic urine was present in the lumen. Mild non-dependent particulate sediment was present without evidence of calculus formation, which 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 mural changes were noted.

The area of the aortic trifurcation was free of pathology.

Normal size and margination was 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 loss of corticomedullary symmetry and definition expected for the age of the patient. Minor pyelectasia noted in both kidneys.

**Adrenal Glands**

**Spleen**

The spleen was borderline enlarged at 1.0 cm in width at the level of the hilus. Maintained symmetrical capsule contour. Subjective mild reduced splenic parenchyma echogenicity noted. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. No masses or nodules noted.

**Liver**



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The liver exhibited potential borderline enlargement. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. Mild to moderate non-organized echogenic gallbladder debris. The cystic and common bile ducts were normal.

**Gastrointestinal**

The stomach presented intact wall layering with a normal wall layer ratio. Minor retained anechoic pyloric fluid. Pylorus wall measures 0.31 cm.

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. Jejunum wall measures 0.21 cm. Ileocolic wall measured 0.28 cm.

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

**Pancreas**

The left limb, right limb, and base of the pancreas presented hypoechoic to heterogeneous echogenicity compared to adjacent omental fat. Mild asymmetrical capsule margination was present with mild variable parenchymal swelling and mild peripancreatic inflammation. No overt evidence of neoplasia.

**Free Abdomen**

No omental masses, evidence of peritoneal free fluid, or overt lymphadenopathy.

**ULTRASONOGRAPHIC FINDINGS**

- Borderline splenomegaly
- Suspect low grade pancreatitis
- Sonographically normal gastrointestinal tract with minor retained pyloric fluid
- Chronic renal changes with minor pyelectasia
- Minor UB sediment
- Hepatopathy with minor gallbladder debris - suspect mild cholangiohepatitis

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Even without evidence of gastrointestinal mural changes, chronic triad disease may be a primary consideration in this patient, assuming no evidence of persistent hyperglycemia/diabetes. No evidence of GI neoplastic criteria or foreign body. A GI panel to include PLI/TLI/Cobalamin/Folate is recommended. Screening hepatosplenic FNA cytology assuming normal clotting status and using 25 ga needle warranted given weight loss. Empirical therapy for triad disease pending additional diagnostics would be reasonable. The 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.



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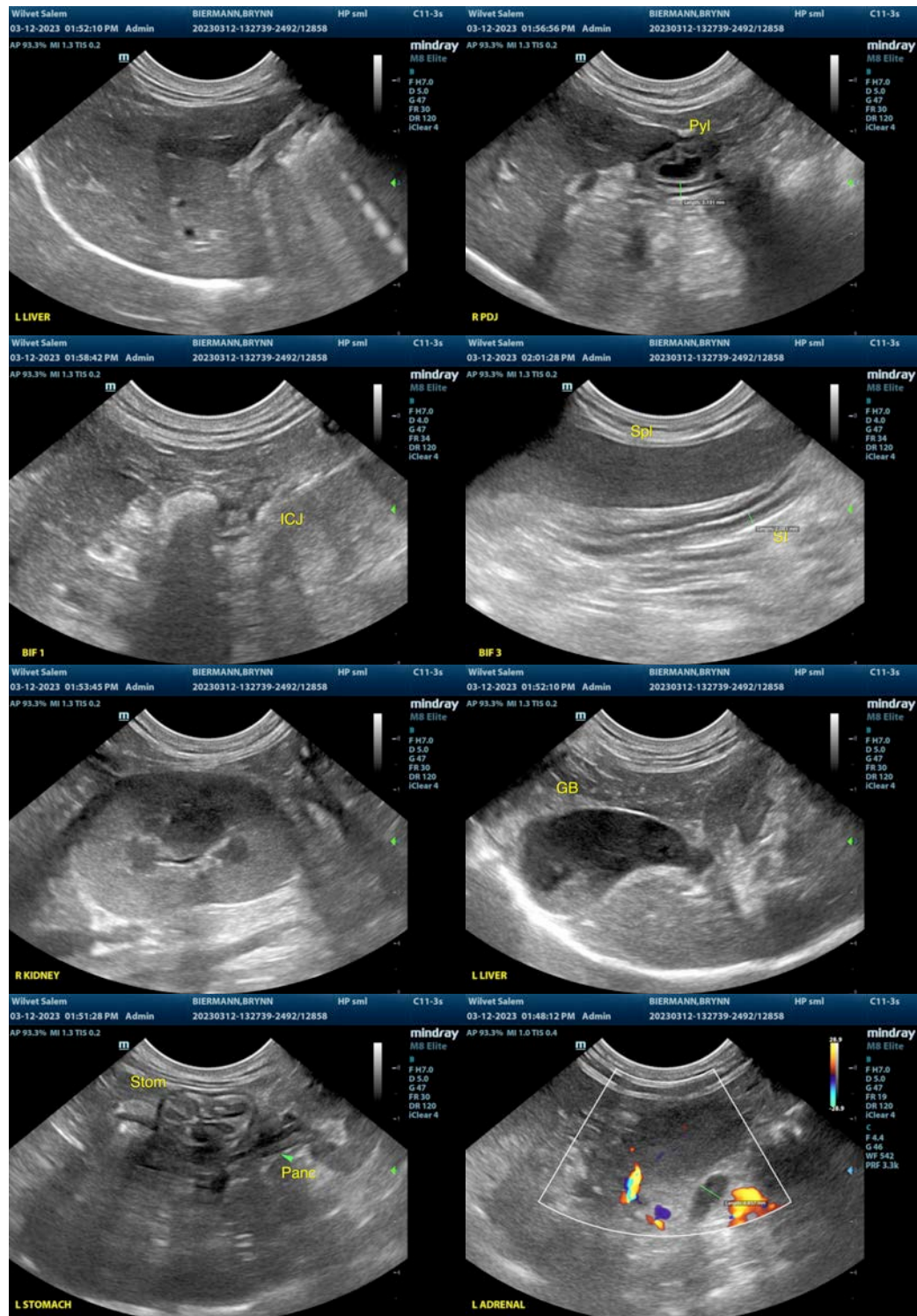
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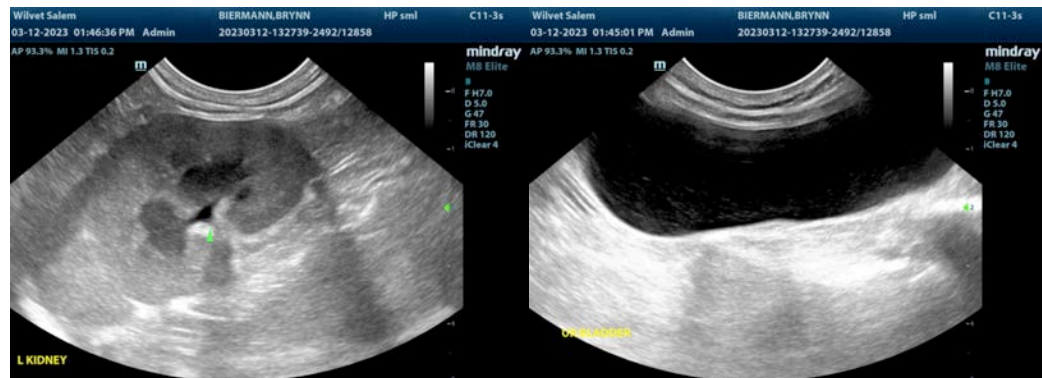
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

**R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)**

info@SonoPath.com