



**PATIENT PRESENTING CLINICAL SIGNS**

**CREAM RUPERT** History: Hyperthyroid, weight loss, vomiting, bowel incontinence, polyphagic  
 Medication: Methimazole, Metronidazole, i/d

**SPECIES** Labs: WBC 47.2 with marked neutrophilia, ALT 283, Glucose 244, Potassium 3.3, T4 2.2

Feline

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED Urinary System**

**DOMESTIC SHORTHAIR** The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 cm exhibited normal thickness and 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. No evidence of inflammatory or neoplastic changes were noted.

**SEX**

**FS** Aortic trifurcation was normal.

**AGE**

**13 years** 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 3.7 cm in length. The right kidney measured 3.7 cm in length.

**WEIGHT**

7.7 Pounds

**Adrenal Glands**

The left adrenal gland was normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The left adrenal gland measured 0.43 cm width.

**INTERPRETED BY**

**R. McKenzie Daniel, DVM, DABVP (Canine and Feline)** No overt pathology in the area of the right adrenal gland.

**Spleen**

The spleen exhibited primarily finely textured parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Mild generalized parenchyma heterogeneity was present without evidence of nodular changes. 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. The parenchymal heterogeneity is likely consistent with benign changes such as extramedullary hematopoiesis or age-related remodeling with minor potential for inflammatory or neoplastic disease. The spleen was normal in size (0.9 cm width).

**IMAGING PERFORMED BY**

**Rebekah Jakum, CVT ARDMS/RVT**

**HOSPITAL NAME**

White Haven VH

**REFERRING VET**

Dr. Sobieray

**Liver**

The liver was mildly enlarged in size. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild to benign parenchymal remodeling. The hepatic and portal vasculature were normal in appearance without signs of congestion. A solitary non-expansive hypoechoic parenchymal nodule was noted in the deep mid liver, measuring 1.0 cm diameter.

**INVOICE**

14142

**DATE**

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The gallbladder and cystic bile duct exhibited generalized distention, containing anechoic fluid with prominent to mildly echogenic walls, extending into the common bile duct which exhibited tortuous moderate to marked yet variable dilation, extending caudally toward the duodenum. The common bile



**PATIENT**

duct dilation measured > or equal to 0.6 cm, width. Potential for bilobed gallbladder possible, although not definitive. Bilobed gallbladder is considered a normal patient variant in a cat.

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**Gastrointestinal**

**SPECIES**

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 gastric body wall measured 0.28 cm.

Feline

**BREED**

The small intestine presented intact wall layering with generalized propensity for prominent muscularis layer without evidence of loss of intestinal wall layering or intestinal masses. The duodenum wall measured 0.35 cm. The jejunum wall measured 0.3 cm.

Domestic Shorthair

**SEX**

Normal visible colon wall layers were present with apparent formed feces in lumen. The ileocolic wall measured 0.36 cm.

FS

**Pancreas**

**AGE**

The pancreas exhibited generalized prominent size with hypoechoic to heterogeneous parenchyma and generalized pancreatic duct dilation.

13 years

**Free Abdomen**

**WEIGHT**

No evidence of significant lymphadenopathy, although, minor mesenteric lymphadenopathy exhibiting normal width to length ratio (<0.5 cm) is possible. A small pocket of scant perihepatic free fluid was noted.

7.7 Pounds

**ULTRASONOGRAPHIC FINDINGS**

**INTERPRETED BY**

**Primary Findings**

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 DVM, DABVP  
 (Canine and Feline)

- Chronic to chronic active pancreatitis
- Hepatopathy with non-specific parenchymal nodule- inflammatory parenchymal disease with potential for solitary nodular to regenerative hyperplasia, focal hematopoiesis or lipogranuloma possible, while the potential for hepatic neoplasia cannot be definitively excluded
- Cholecystitis/cholangitis pattern with moderate to marked common bile duct dilation, potential bilobed gallbladder
- Enteropathy with a generalized prominent muscularis layer- inflammatory versus neoplastic infiltrative enteropathy
- Scant perihepatic free fluid

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**Secondary Findings**

- Bilateral mild chronic renal changes

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Assuming normal clotting status, hepatic parenchymal and nodular FNA (using a 25-gauge needle) is warranted for screening cytology for further clarification. Potential for acute on chronic triad disease is of concern given the presentation of the small intestine, pancreas and hepatobiliary system. Further



**PATIENT**

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assessment may include GI panel, to include PLI, TLI, cobalamin and folate. Full thickness intestinal, pancreatic and hepatic biopsies would be required for a definitive diagnosis. CBC pathology review given the marked leukocytosis with neutrophilia recommended.

**SPECIES**

Feline

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Domestic Shorthair

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FS

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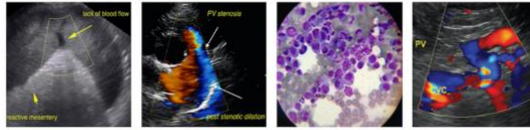
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.



**PATIENT**

Cream Rupert

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.

**SPECIES**

Feline

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Domestic Shorthair

**SEX**

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**AGE**

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