

**PATIENT PRESENTING CLINICAL SIGNS**

Gracie Krall History: Vomiting, loose stool, decreased appetite  
Medication: Cerenia, Pepcid

**SPECIES**  
Canine CBC- Platelets 717

Chemistry Panel- ALP 448, ALT 221, Amylase 2163, Lipase 2410

**BREED ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Bichon Frise **Urinary System**

**SEX**  
FS The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 4.0 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 was noted.

**AGE**  
13 years The area of the aortic trifurcation was free of pathology.

**WEIGHT**  
16.1 Pounds 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 4.8 cm in length. The right kidney measured 5.1 cm in length.

**Adrenal Glands**

**INTERPRETED BY**  
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)  
The bilateral adrenal glands were normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. A non-expansive, well-demarcated, echogenic, cranial nodule was present in the left adrenal gland, measuring 0.35 cm in diameter. The left adrenal gland itself measured 2.4 cm length x 0.65 cm width in the cranial pole. The right adrenal gland measured 2.1 cm length x 0.39 cm width in the cranial pole.

**Spleen**

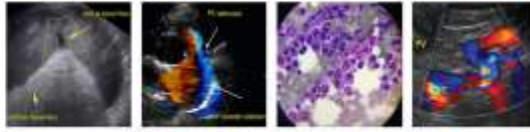
**HOSPITAL NAME**  
Maple Hills VH  
The spleen exhibited primarily finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Multifocal, well-defined, symmetrical, echogenic nodules were present throughout the cranial to caudal parenchyma. The capsule 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**

**INVOICE**  
12202 The liver exhibited generalized enlargement with rounded primary to symmetrical capsule contour. Generalized, nonuniform to mixed echogenic parenchyma with subtle, variably echogenic, nodular changes were noted.

**DATE**

9.10.2021



**PATIENT** Gracie Krall  
The gallbladder was non distended in size with moderate, nondependent yet nonorganized, subjective mobile biliary sludge. The cystic duct and common bile ducts were normal without evidence of dilation.

**SPECIES** *Gastrointestinal*

Canine  
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 width measured 0.27 cm.

**BREED** Bichon Frise  
The small intestine exhibited intact wall layering with subjective propensity for mildly prominent mucosa layer. No evidence of loss of intestinal wall layering, intestinal masses, or mechanical / metabolic Ileus.

**SEX** FS  
Normal visible colon wall layers were present with subjective formed to semi-formed feces in lumen.

**AGE** *Pancreas*

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

*Free Abdomen*

**WEIGHT** 16.1 Pounds  
No overt lymphadenopathy or peritoneal effusion was present.

**ULTRASONOGRAPHIC FINDINGS**

*Primary Findings*

- Hepatomegaly with generalized, nonuniform to mixed echogenic parenchyma - vacuolar hepatopathy, chronic active hepatitis, cholangiohepatitis with parenchymal remodeling, nodular to regenerative hyperplasia, hematopoiesis, early fibrosis / cirrhosis, neoplasia or other hepatopathy possible
- Moderate gallbladder debris (non-mucocele)
- Cranial left adrenal nodule - suspect adenoma
- Benign splenic nodules - consistent with probable benign myelolipomas
- Mild inflammatory enteropathy pattern
- Heterogeneous pancreas - age / patient variant, potential for low-grade chronic inflammation possible

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Rebekah Jakum, CVT  
ARDMS/RVT

**HOSPITAL NAME**

Maple Hills VH

**REFERRING VET**

Dr. Banzhof

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Assuming normal clotting status, ultrasound-guided hepatic FNA for screening cytology is warranted. Empirically, hepatosupportive medications including Denamarin and Ursodiol may prove beneficial.

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Fresh fecal analysis to assess for ova / Giardia and assessment of serum Cobalamin and Folate levels may be considered. In addition to current gastrointestinal support, a limited antigen to hydrolyzed diet may prove beneficial. Three view chest radiographs are recommended to rule out occult thoracic pathology.



**PATIENT**

Gracie Krall

**SPECIES**

Canine

**BREED**

Bichon Frise

**SEX**

FS

**AGE**

13 years

**WEIGHT**

16.1 Pounds

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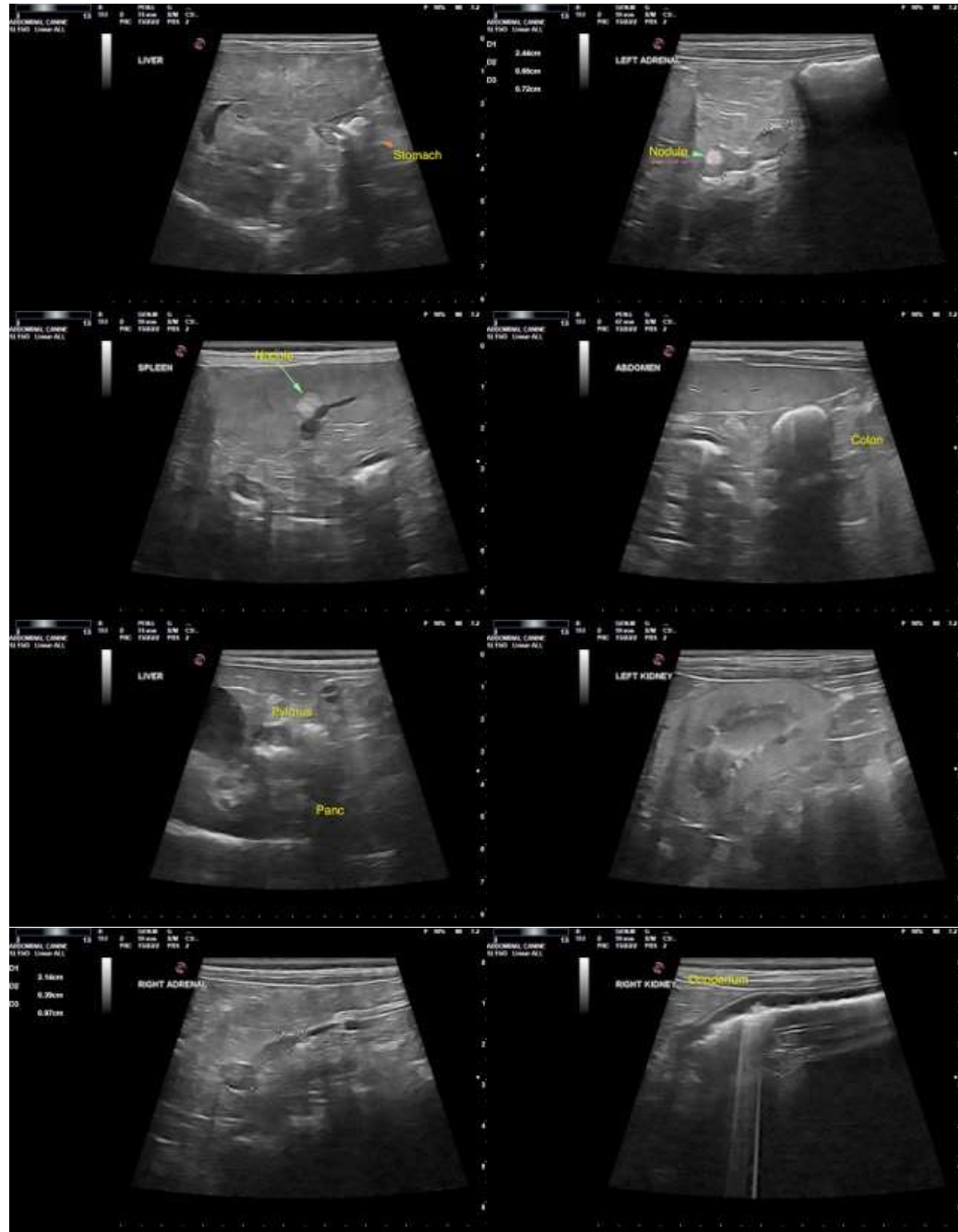
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**PATIENT**

Gracie Krall

**SPECIES**

Canine

**BREED**

Bichon Frise

**SEX**

FS

**AGE**

13 years

**WEIGHT**

16.1 Pounds

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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.**

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)**  
[mac.daniel@sonopath.com](mailto:mac.daniel@sonopath.com)