



**PATIENT PRESENTING CLINICAL SIGNS**

Eve Romano Liver disease, elevated liver values Ursodial  
 ALT 402, ALP 277, GGT 25, TBili 0.2

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Canine **Urinary System**

**BREED** The urinary bladder was mildly subnormal in size owing to lack of urine distention. Complete sonographic assessment of the bladder was somewhat limited owing to lack of urine distention, yet no overt evidence of inflammatory or neoplastic criteria was evident. No calculi were noted. The urethra exhibited normal structure and tone to a depth of 2.0 cm.

Maltese Mix

**SEX** No evidence of pathology in the area of the aortic trifurcation.

FS 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. Focal thinly walled medullary cyst containing anechoic fluid was present in the right kidney. No evidence of pelvic dilation was present. The left kidney measured 3.8 cm in length. The right kidney measured 3.85 cm in length.

**AGE**

2007

**WEIGHT Adrenal Glands**

11.2

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.63 cm width at the caudal pole and 0.45 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 0.53 cm width at the caudal pole and 0.49 cm width at the cranial pole.

**INTERPRETED BY**

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

**Spleen**

**IMAGING PERFORMED BY**

Rebekah Jakum, CVT ARDMS/RVT

Previously noted, variably echogenic splenic nodules in the cranial, mid, and caudal spleen were present. Isoechoic to nonhomogeneous, subtly expansive nodule in the caudomedial spleen measured 1.0 cm in diameter. Concurrent, non-expansive, hypoechoic nodules noted in the cranial spleen measured 0.54 cm in diameter.

**HOSPITAL NAME**

White Haven VH

**Liver/ Gallbladder**

**REFERRING VET**

Dr. Wentz

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 exhibited mild parenchymal remodeling. Focal to intermittent, non-expansive, discrete hypoechoic hepatic parenchymal nodules were noted. An example of a hepatic nodule measured 0.58 cm in diameter. 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.

**INVOICE**

13497

**DATE**

3/16/22



**PATIENT** *Gastrointestinal*

Eve Romano 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.

**SPECIES** The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio to the level of the ileocolic junction. The ileocolic junction exhibited subjective nonspecific decreased wall layer detail, yet without overt evidence of neoplastic criteria.  
 Canine

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

Maltese Mix **Pancreas**

**SEX** The parenchyma of the pancreas base and right pancreatic limb was hyperechoic to adjacent omental fat with diffuse parenchyma remodeling. The capsule of the pancreas was mildly asymmetrical in contour without evidence of peripancreatic inflammation. These changes may suggest chronic inflammation, fibrosis, or saponification if previous history of pancreatitis. No overt signs of pancreatic neoplasia.  
 FS

**AGE** *Free Abdomen*  
 2007 No overt lymphadenopathy or peritoneal effusion was present.

**WEIGHT** **ULTRASONOGRAPHIC FINDINGS**

11.2

- Subjectively static, variably echogenic splenic nodules

**INTERPRETED BY**

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

- Subjective static hepatic presentation - consistent with benign hepatopathy, primary consideration for nonspecific inflammatory hepatic parenchymal disease given the primarily elevated ALT with potential primary or concurrent to vacuolar hepatopathy with intermittent areas of nodular to regenerative hyperplasia or hematopoiesis likely, no overt hepatic neoplastic criteria which is considered less likely

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Rebekah Jakum, CVT  
 ARDMS/RVT

- Normal gallbladder
- Static mild chronic renal changes

**HOSPITAL NAME**

White Haven VH

- Hyperechoic pancreas base and right pancreas - possible chronic pancreatitis or fibrosis

**REFERRING VET**

Dr. Wentz

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Assuming normal clotting status, hepatosplenic FNA using a 25-gauge needle could be considered for screening cytology if not previously or recently done. Continued hepatosupportive medications including Denamarin and Ursodiol are warranted. Periodic sonographic monitoring of the liver and splenic nodules for evidence of progression would be appropriate. Spec cPL could be considered.

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**PATIENT**

Eve Romano

**SPECIES**

Canine

**BREED**

Maltese Mix

**SEX**

FS

**AGE**

2007

**WEIGHT**

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**HOSPITAL NAME**

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**REFERRING VET**

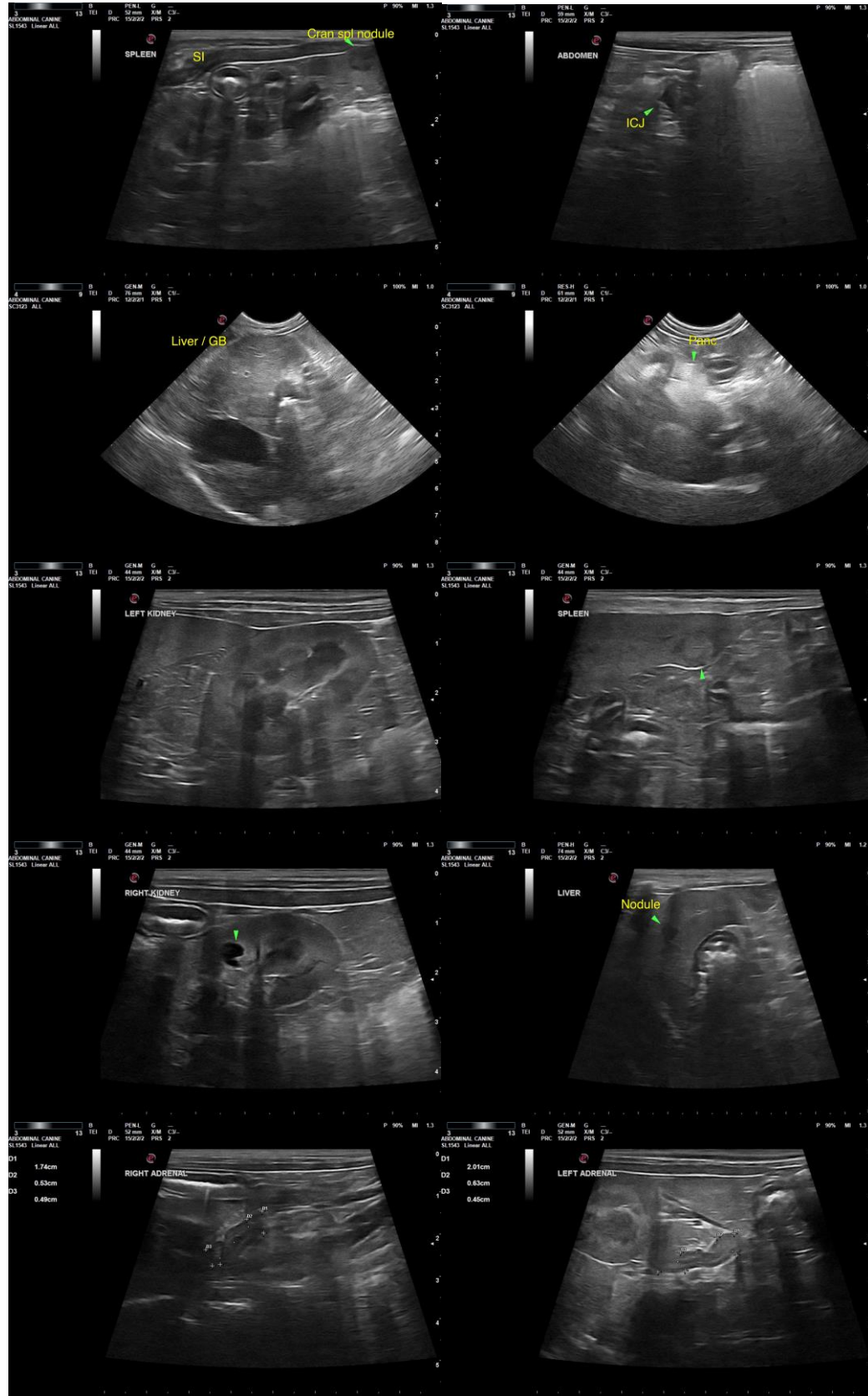
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**PATIENT**

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**SPECIES**

Canine

**BREED**

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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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