

**PATIENT**

Dusty Sears

**PRESENTING CLINICAL SIGNS**

History: Liver values have been checked recently due to starting Gallaprant. They were high. Patient was taken off Gallaprant. Values continued to increase.

**SPECIES**

Canine

Abnormal PE/Chem/CBC/UA Results: Severely elevated ALT and ALKP.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****BREED**

Maltese

**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 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**

MN

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 mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. Multiple small cortical cysts were present in the left and right kidney. The left kidney measured 4.9 cm in length. The right kidney measured 5.5 cm in length.

**AGE**

10 yr

The area of the aortic trifurcation was free of pathology.

**WEIGHT**

18 lb

No overt pathology in the area of the residual prostate.

**Adrenal Glands**

The bilateral adrenal glands were normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The left adrenal gland measured 1.6 cm width in the cranial pole and 0.41 cm width in the caudal pole. The right adrenal gland measured 1.6 cm width in the cranial pole and 0.47 cm width in the caudal pole.

**INTERPRETED BY**

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

**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.

**IMAGING PERFORMED BY**

Sarah Pender CVT

**Liver**

The liver exhibited variable to generalized enlargement including subjective asymmetrical lobar swelling. Areas of asymmetrical ventral and caudal hepatic contour and generalized mild nonuniform parenchyma with intermittent mildly nonhomogeneous to hypoechoic nodules were present an example measuring 2.8 cm in diameter. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content containing mild debris. No evidence of peripheral gallbladder inflammation. The cystic and common bile ducts were normal.

**HOSPITAL NAME**

SVS Imaging QC

**REFERRING VET**

Dr. Elliot

**INVOICE**

10878ag

**Gastrointestinal**

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.

**DATE**

06/21/2022

**PATIENT**

Dusty Sears

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.

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

**SPECIES****Pancreas**

Canine

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

**BREED****Free Abdomen**

Maltese

No overt lymphadenopathy or peritoneal effusion was present.

**SEX**

MN

**ULTRASONOGRAPHIC FINDINGS****AGE**

10 yr

- Heterogeneous to irregular intermittently nodular liver with asymmetric lobar swelling
- Mild gallbladder debris (non-mucocele)
- Bilateral chronic renal changes with intermittent cortical cysts
- Mild pancreatic remodeling

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS****WEIGHT**

18 lb

The overall hepatic presentation and diffuse parenchymal changes were nonspecific considerations may include vacuolar hepatopathy, inflammatory/immune mediated disease, areas of nodular to regenerative hyperplasia, fibrosis, hematopoiesis with some potential contribution owing to hepatotoxic insult, cholestasis, infiltrative neoplasia or other hepatopathy. Assuming normal clotting status an ultrasound guided FNA of the hepatic parenchyma and nodule if accessible for screening cytology. A hepatic core or surgical biopsy may be indicated for definitive diagnosis. Empirical hepatosupportive medication including Denamarin and Ursodiol may prove beneficial.

**INTERPRETED BY**

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

Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered.

**IMAGING PERFORMED BY**

Sarah Pender CVT

**HOSPITAL NAME**

SVS Imaging QC

**REFERRING VET**

Dr. Elliot

**INVOICE**

10878ag

**DATE**

06/21/2022



**PATIENT**

Dusty Sears

**SPECIES**

Canine

**BREED**

Maltese

**SEX**

MN

**AGE**

10 yr

**WEIGHT**

18 lb

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Sarah Pender CVT

**HOSPITAL NAME**

SVS Imaging QC

**REFERRING VET**

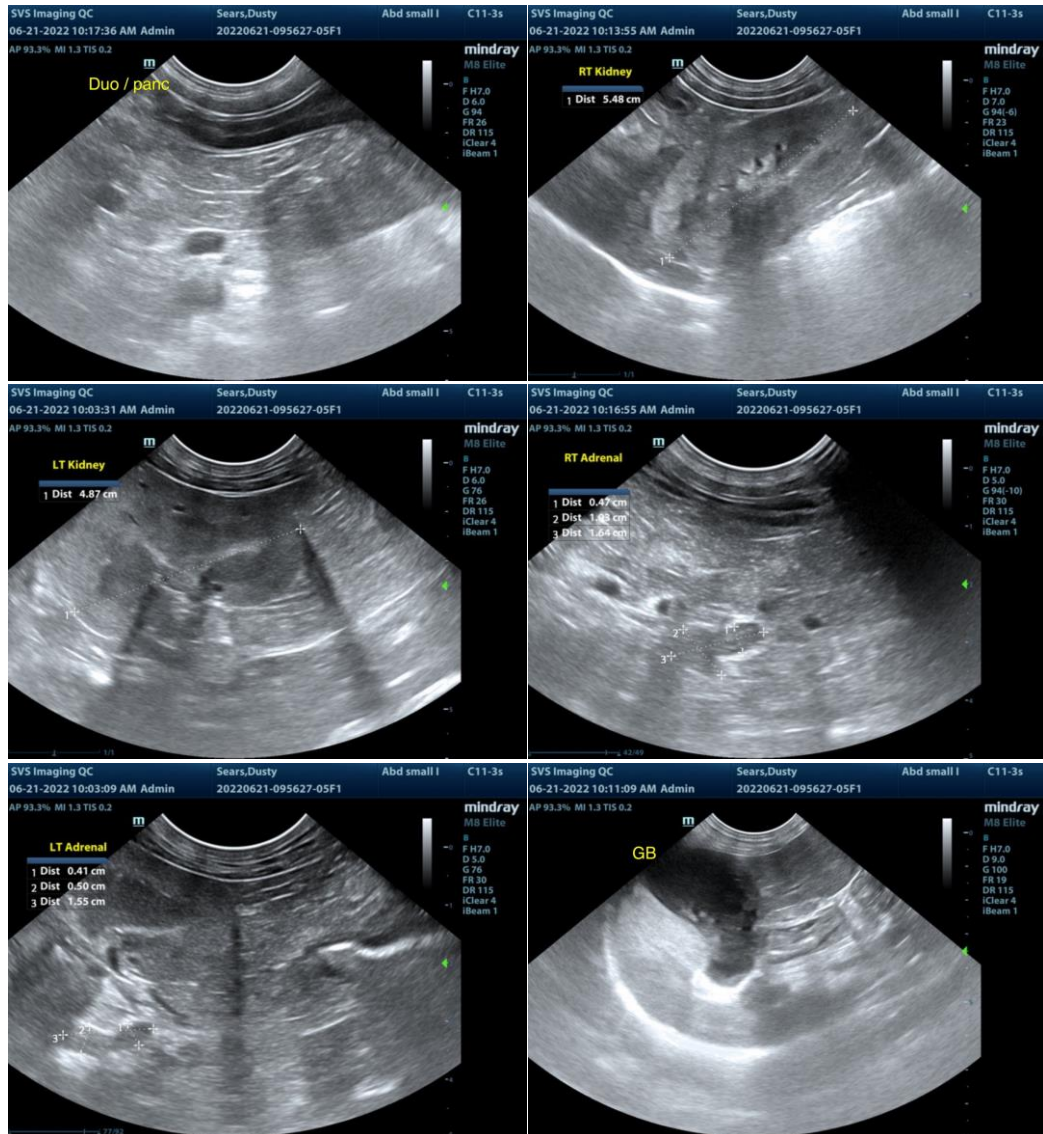
Dr. Elliot

**INVOICE**

10878ag

**DATE**

06/21/2022





**PATIENT**

Dusty Sears

**SPECIES**

Canine

**BREED**

Maltese

**SEX**

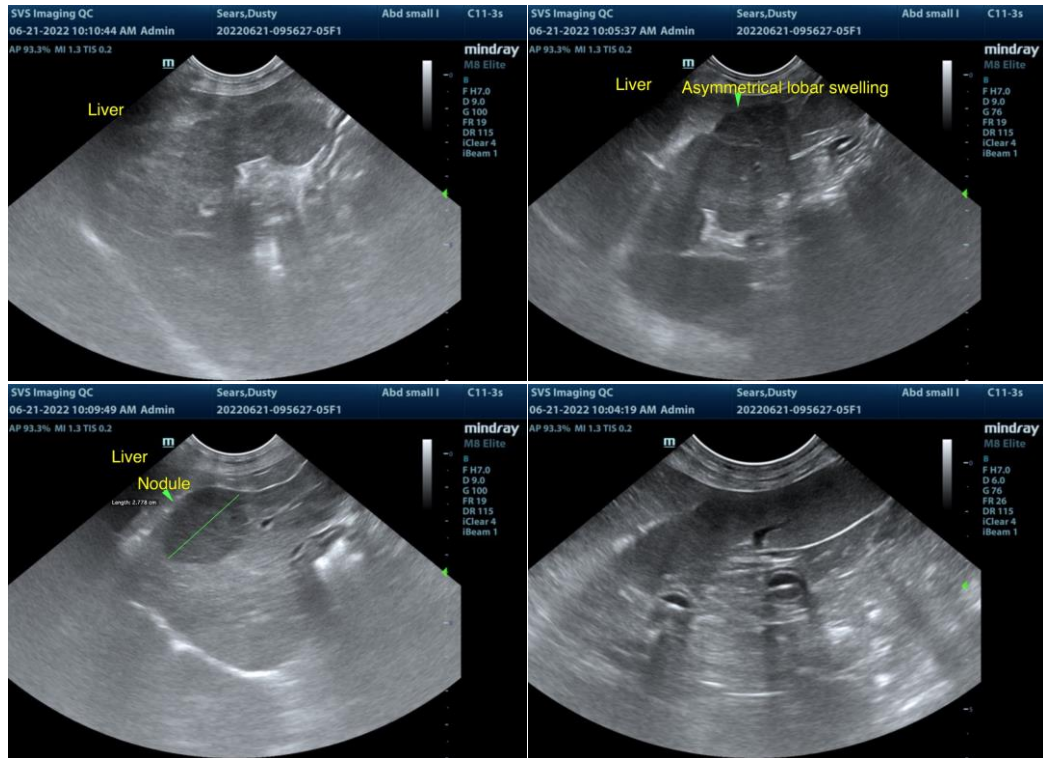
MN

**AGE**

10 yr

**WEIGHT**

18 lb



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.

**INTERPRETED BY**

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

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

**IMAGING PERFORMED BY**

Sarah Pender CVT

**HOSPITAL NAME**

SVS Imaging QC

**REFERRING VET**

Dr. Elliot

**INVOICE**

10878ag

**DATE**

06/21/2022