

**PATIENT**

Axel Creten

**SPECIES**

Canine

**BREED**

Shepherd Mix

**SEX**

MN

**AGE**

14 years

**WEIGHT**

106 lbs.

**INTERPRETED BY**R. McKenzie Daniel,  
DVM, DABVP (Canine  
and Feline)**IMAGING  
PERFORMED BY**

Sarah Pender, CVT

**HOSPITAL NAME**

SVS Imaging KC

**REFERRING VET**

Dr. Klepper

**INVOICE**

13190

**DATE**

1/27/22

**PRESENTING CLINICAL SIGNS**

-Panting, tachycardia. Pt is obese. Heavy fat accumulation on chest, under neck, and over hips. Pt has very hard time getting around and getting up on slick floors. Pt prefers to lay down.  
Abnormal PE/Chem/CBC/UA Results: Elevated liver enzymes: ALT 147, ALP 1016.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3.0 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.

No evidence of pathology was noted in the area of the residual prostate.

The area of the aortic trifurcation was free of pathology.

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 to moderate loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 8.3 cm in length. The right kidney measured 8.5 cm in length.

**Adrenal Glands**

The bilateral adrenal glands mild prominent in size yet without overt evidence of neoplastic criteria. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The left adrenal gland measured 1.1 cm width in the cranial pole and 0.95 cm width in the caudal pole. The right adrenal gland measured 1.1 cm width in the cranial pole and 0.98 cm width in the caudal pole. No evidence of adrenal neoplastic disease was evident.

**Spleen**

The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical 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, neoplastic, or benign parenchyma changes were not noted.

**Liver/ Gallbladder**

The liver exhibited subjective mild generalized enlargement with normal structure and contour. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild parenchymal remodeling. The hepatic and portal vasculature were normal in appearance without signs of congestion. No hepatic masses or nodules were noted. The gallbladder was non-distended in size with mild gallbladder debris. The gallbladder debris was mildly congealed yet nondependent and nonorganized. The cystic and common bile ducts were normal.

**PATIENT**

Axel Creten

***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.

**SPECIES**

Canine

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.

**BREED**

Shepherd Mix

***Pancreas***

The parenchyma of the left limb, body, and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease were evident.

**SEX**

MN

***Free Abdomen***

No omental masses, lymphadenopathy or peritoneal effusion were present. A subjective increased amount of omental fat was present.

**AGE**

14 years

**ULTRASONOGRAPHIC FINDINGS****WEIGHT**

106 lbs.

***Primary Findings***

- Bilateral mild prominent adrenal glands - nonspecific, no overt adrenal neoplasia
- Hepatopathy - subjectively benign
- Mild gallbladder debris (non-mucocele)
- Bilateral mild chronic renal changes

**INTERPRETED BY**

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

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Overall, no evidence of significant abdominal visceral pathology was noted.

**IMAGING PERFORMED BY**

Sarah Pender, CVT

The appearance of the liver was nonspecific but most consistent with benign hepatopathy. Considerations for the liver may include benign vacuolar hepatopathy in light of the elevated ALP or inflammatory/infectious hepatic disease in light of the elevated ALT. No overt evidence of hepatic neoplasia which is considered a less likely differential diagnosis. Ultrasound-guided FNA of the liver using a 25-gauge needle and assuming normal coagulation parameters would be warranted for screening cytology, primarily to assess for evidence of inflammatory cells and to rule out unlikely neoplasia. Hepatosupportive medications such as Denamarin or Vitamin E as well as Ursodiol due to its antioxidant and immunomodulatory effects within the liver would be warranted, although these medications may not result in decreased hepatic enzyme levels.

**HOSPITAL NAME**

SVS Imaging KC

**REFERRING VET**

Dr. Klepper

Full adrenal workup may be considered if clinical suspicion of underlying suspicion of hyperadrenocorticism i.e., concurrent PU/PD, polyphagia, decreased urine specific gravity etc.

**INVOICE**

13190

**DATE**

1/27/22



**PATIENT**

Axel Creten

**SPECIES**

Canine

**BREED**

Shepherd Mix

**SEX**

MN

**AGE**

14 years

**WEIGHT**

106 lbs.

**INTERPRETED BY**

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

**IMAGING  
PERFORMED BY**

Sarah Pender, CVT

**HOSPITAL NAME**

SVS Imaging KC

**REFERRING VET**

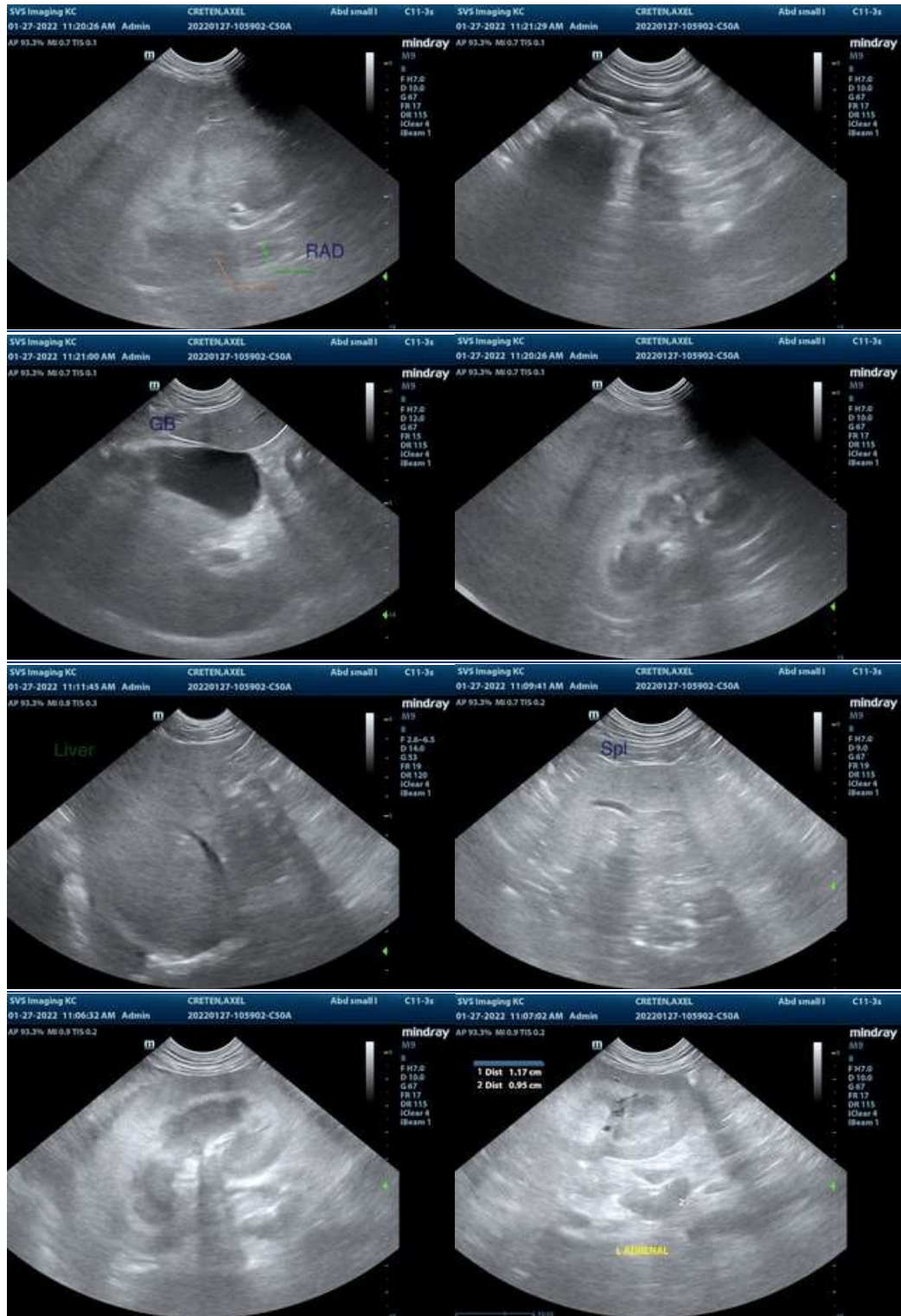
Dr. Klepper

**INVOICE**

13190

**DATE**

1/27/22



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.

**IMAGING PERFORMED BY**

SVS Mobile Imaging KC 816-403-5010  
svsmagingkc@gmail.com



EDUCATIONAL TELECONSULTATION SERVICES™

1-800-838-4268 info@sonopath.com SonoPath.com

**PATIENT**

Axel Creten

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**

Canine

**R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)**  
**info@SonoPath.com**

**BREED**

Shepherd Mix

**SEX**

MN

**AGE**

14 years

**WEIGHT**

106 lbs.

**INTERPRETED BY**

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

**IMAGING  
PERFORMED BY**

Sarah Pender, CVT

**HOSPITAL NAME**

SVS Imaging KC

**REFERRING VET**

Dr. Klepper

**INVOICE**

13190

**DATE**

1/27/22