



<b>PATIENT</b>	<b>PRESENTING CLINICAL SIGNS</b>
Rocko Heck	High liver value first noted in august 2021 was started on Denamarin. recheck 1 month later still high. then there was a gap from October until today where the ALT is still at 165. no clinical signs at home and has been off Denamarin since October
<b>SPECIES</b>	
Canine	<b>ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN</b>
<b>BREED</b>	<b>Urinary System</b>
Mix	Urinary bladder is moderately distended with anechoic contents. It has normal uniform wall thickness (< 0.2 cm). No masses or cystoliths are observed.
<b>SEX</b>	The prostate is normal for a neutered dog.
Neutered male	Left kidney is normal in size (4.3 cm), shape and echogenicity. It has smooth peripheral margination and appropriate corticomedullary distinction. There is no pyelectasia noted. No mineral is observed.
<b>AGE</b>	Right kidney is normal in size (4.3 cm), shape and echogenicity. It has smooth peripheral margination and appropriate corticomedullary distinction. There is no pyelectasia noted. No mineral is observed.
4 years	
<b>WEIGHT</b>	<b>Adrenal Glands</b>
12.88 lbs	Left adrenal gland is normal in size (1.7 cm long, 0.42 cm at cranial pole and 0.32 cm at caudal pole), shape and contour. Corticomedullary structure is unremarkable.
<b>INTERPRETED BY</b>	The region of the right adrenal gland is evaluated without evident pathology; however, discrete measurement cannot be made from these images.
Beth Johnson, DVM DACVIM	
<b>IMAGING PERFORMED BY</b>	<b>Spleen</b>
Dr. Puthoff	Spleen is subjectively normal in size with normal smooth margins. Parenchyma is normal in echogenicity and echotexture. No focal nodules or masses are observed. Splenic vasculature appears normal.
<b>HOSPITAL NAME</b>	<b>Liver</b>
Kings VH	Liver is subjectively normal in size. Margins are sharp and smooth. It has normal homogenous echotexture and normal echogenicity. No focal lesions are observed. Visible vasculature appears normal. Gallbladder is mildly distended with anechoic contents. The wall is smooth without visible thickening. There is no evidence of common bile duct dilation.
<b>REFERRING VET</b>	
Dr. Puthoff	<b>Gastrointestinal</b>
<b>INVOICE</b>	The visible gastric wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm). The stomach is empty.
95838	The small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). There are no luminal contents noted within small intestines.
<b>DATE</b>	Colon is normal in wall thickness (< 0.2 cm) and layering.
2/7/22	



**PATIENT**

**Pancreas**

Rocko Heck

Pancreas has normal homogenous echotexture and is normal in echogenicity and smooth margination. There is no evidence of peripancreatic inflammation.

**SPECIES**

Canine

**Free Abdomen**

Lymph nodes are normal with no observed enlargement.

**BREED**

Mix

**ULTRASONOGRAPHIC FINDINGS**

**SEX**

**Primary Findings**

Neutered male

Unremarkable abdomen.

**AGE**

4 years

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**WEIGHT**

12.88 lbs

ALT is more liver specific than other enzymes. It is a good indicator of active liver damage (cell membrane disruption, cellular necrosis) if the value is increased by at least 3-4 times normal. Differentials include infectious disease, including Leptospirosis, inflammatory disease (ie. active hepatitis, copper, other), toxic insult as well as infiltrative neoplasia.

ALT levels vary in cases of vascular anomalies such as microvascular dysplasia and portosystemic shunts (PSS), but are often less significantly increased.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

Specifically this patient recommendations include bile acids for further evaluation of any possible liver dysfunction, if not already performed as well as testing for Leptospirosis.

**IMAGING PERFORMED BY**

Dr. Puthoff

**HOSPITAL NAME**

Kings VH



**REFERRING VET**

Dr. Puthoff

**INVOICE**

95838

**DATE**

2/7/22



**PATIENT**

Rocko Heck

**SPECIES**

Canine

**BREED**

Mix

**SEX**

Neutered male

**AGE**

4 years

**WEIGHT**

12.88 lbs

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING PERFORMED BY**

Dr. Puthoff

**HOSPITAL NAME**

Kings VH

**REFERRING VET**

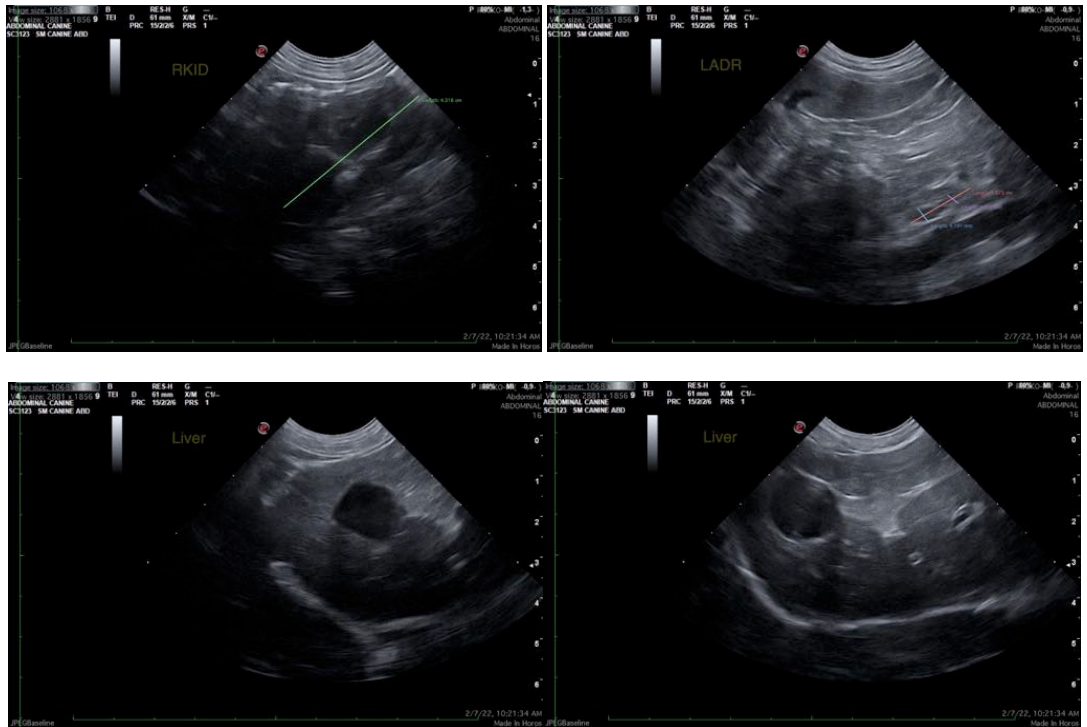
Dr. Puthoff

**INVOICE**

95838

**DATE**

2/7/22



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.

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.

Beth Johnson, DVM DACVIM

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