

**PATIENT**

Kramer Link

**SPECIES**

Canine

**BREED**

Mini Schnauzer

**SEX**

MN

**AGE**

9 Years

**WEIGHT**

21.2 lbs

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Hannah Fearing

**HOSPITAL NAME**

Lanier Animal Hospital

**REFERRING VET**

Hannah Fearing

**INVOICE**

49236

**DATE**

12-24-21

**PRESENTING CLINICAL SIGNS**

Hx of elevated liver enzymes and proteinuria. Currently on ursodiol, Denamarin, telmisartan. Abnormal PE/Chem/CBC/UA Results: 12/10/21: Ca 12.2; ALP 426; UPC 0.8 w/ USG = 1.054 6/24/21: ALP 281 (down from 384); UPC 0.6 (down from 1.1) w/ USG = 1.050 has also had mild elevations of ALT in the past; highest UPC was 1.7 in 12/2020

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

*Urinary System*

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra 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.

The area of the residual prostate was free of pathology.

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

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 border demarcation expected for the age of the patient. Pinpoint areas of medullary mineral were present. No evidence of pyelectasia was present in either kidney. The left kidney measured 5.1 cm in length. The right kidney measured 5.1 cm in length.

*Adrenal Glands*

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.55 cm width at the caudal pole and 0.5 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 0.40 cm width at the caudal pole and 0.43 cm width at the cranial pole.

*Spleen*

The spleen was normal in size and contour with primarily maintained finely textured homogeneous parenchyma with previously noted nonexpansive hyperechoic parenchymal nodules. An example of a nodule measured 0.7 cm diameter. 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.

*Liver / Gallbladder*

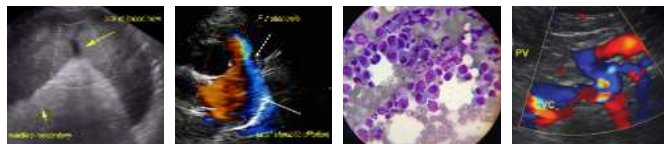
The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion.

The gallbladder was non distended in size with mild nonorganized and nonmineralized gallbladder debris primarily in the gallbladder neck. The cystic duct and common bile ducts were normal without evidence of dilation. No evidence of gallbladder or peripheral inflammation.

*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.

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.



**PATIENT**

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

Kramer Link

***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 was evident.

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Canine

***Free Abdomen***

**BREED**

No overt lymphadenopathy or peritoneal effusion was present.

Mini Schnauzer

**ULTRASONOGRAPHIC FINDINGS**

**SEX**

- Benign splenic nodules - subjectively static, myelolipomas, mineralization, previous infarct possible.
- Benign hepatopathy.
- Minor gallbladder debris (nonmucocele).
- Mild chronic renal changes exhibiting pinpoint medullary mineral.

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**WEIGHT**

The bilateral kidneys are suggestive of likely chronic glomerulopathy given the history of proteinuria and current mildly elevated UPC. Continued ARB recommended with continued periodic monitoring of UPC. Continued hepatosupportive medications recommended.

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Recheck sonogram suggested if persistent / progressive hepatic enzyme elevation or increasing UPC despite medical therapy.

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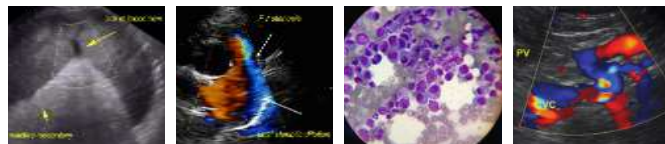
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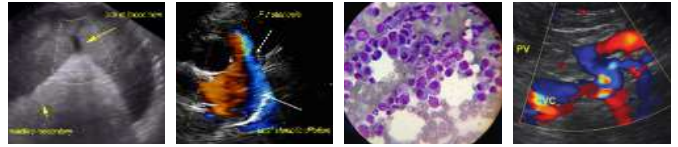
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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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info@SonoPath.com

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