



<b>PATIENT</b>	<b>PRESENTING CLINICAL SIGNS</b>
George Mullan	History: Increased WBCs and Neutrophils ( moderate), Azotemia, increased phosphorus, increased ALT, ALP, GGT
<b>SPECIES</b>	<b>ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN</b>
Canine	<b>Urinary System</b>
<b>BREED</b>	The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 1.0 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 were noted.
Chihuahua	
<b>SEX</b>	The area of the residual prostate appeared normal and free of pathology.
Neutered Male	The area of the aortic trifurcation was free of pathology.
<b>AGE</b>	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. No overt pyelectasia or pyelonephritis. The left kidney measured 4.0 cm in length. The right kidney measured 3.8 cm in length.
11 Years	
<b>WEIGHT</b>	<b>Adrenal Glands</b>
13.5 Lbs.	No overt pathology in the area of the left or right adrenal glands, although not definitively visualized.
<b>INTERPRETED BY</b>	<b>Spleen</b>
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	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.
<b>IMAGING PERFORMED BY</b>	<b>Liver</b>
Dr. Kivircik	The liver exhibited subjective normal size in light of breed with maintained symmetrical capsule contour. Subjective mild uniform decreased hepatic parenchymal echogenicity with subtle increased prominence of portal vascular borders. No masses or nodules noted in the liver.
<b>HOSPITAL NAME</b>	<b>Gastrointestinal</b>
Kings VH	The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal.
<b>REFERRING VET</b>	
Dr. Kivircik	The stomach presented intact yet mildly prominent wall layering with a normal wall layer ratio. The lumen of the stomach was empty with mild luminal gas. The gastric body wall measured 0.46 cm.
<b>INVOICE</b>	
13708	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. The duodenum wall measured 0.50 cm.
<b>DATE</b>	
2/1/22	Normal visible colon wall layers were present with apparent formed feces in lumen.



**PATIENT**

***Pancreas***

George Mullan

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

**SPECIES**

***Free Abdomen***

Canine

No overt lymphadenopathy or peritoneal effusion was present.

**BREED**

Chihuahua

**ULTRASONOGRAPHIC FINDINGS**

- Hepatopathy- subjectively benign
- Nonspecific mild chronic renal changes
- Sonographically unremarkable gallbladder
- Mildly heterogeneous to hyperechoic pancreas- nonspecific, patient or age-related variant, remodeling owing to previous inflammation or low-grade pancreatitis possible.
- Suspect mild gastroenteritis

**SEX**

Neutered Male

**AGE**

11 Years

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**WEIGHT**

13.5 Lbs.

The overall liver was nonspecific yet most consistent with benign potentially acute or subacute hepatopathy. Considerations may include nonclinical cholestasis and vacuolar hepatic changes given the elevated ALP/GGT combination with potential for primary or concurrent nonspecific hepatitis/cholangiohepatitis (viral, bacterial, leptospirosis, toxin or other) with occult hepatic neoplasia considered an unlikely differential diagnosis.

**INTERPRETED BY**

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

Subjectively, the kidneys did not appear to be end-stage, potentially indicating acute renal insult depending on the degree of azotemia. Further assessment may include urine culture and sensitivity and baseline UPC on sterile urine sample, leptospirosis titers/PCR (if clinically indicated) and, if accessible, assuming normal clotting status, hepatic FNA for screening cytology. Empirically, hospitalization with empirical hepatitis/cholangiohepatitis protocol with as needed gastrointestinal and renal support with assessment of hepatic and renal response.

**IMAGING PERFORMED BY**

Dr. Kivircik

**HOSPITAL NAME**

Kings VH



**REFERRING VET**

Dr. Kivircik

**INVOICE**

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**DATE**

2/1/22



**PATIENT**

George Mullan

**SPECIES**

Canine

**BREED**

Chihuahua

**SEX**

Neutered Male

**AGE**

11 Years

**WEIGHT**

13.5 Lbs.

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**HOSPITAL NAME**

Kings VH

**REFERRING VET**

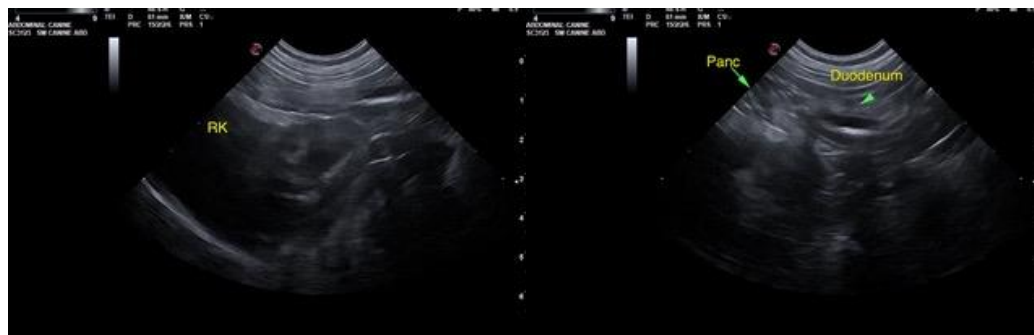
Dr. Kivircik

**INVOICE**

13708

**DATE**

2/1/22



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.

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)**  
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