



PATIENT	PRESENTING CLINICAL SIGNS
Hercules Reinbold	Presented at our hospital for being transferred from AHDC. Pet was seen by Hershey ER on Friday for limping and was given Gabapentin for pain medication. On Monday, the pet began to vomit and stopped eating. The client was able to get an appointment for Wed with their rDVM and they did some bloodwork and then gave Cerenia and Convenia. Hercules was still not eating and seemed to get very lethargic throughout Thursday, so the client took pet to AHDC. There they diagnosed the pet with kidney disease based off of previous bloodwork and recommended transferring for hospitalization. Previous Health Concerns: Collapsing trachea, kidney disease Current Medications: Convenia inj (6/28, 3pm), Cerenia inj (6/28, 3pm)
SPECIES	
Canine	
BREED	
Chihuahua	Abnormal PE/Chem/CBC/UA Results: Abdominal: too tense to assess Cbc 59,080 primary neuts Chem bun 56 creat 1.5 PK 5.8 ca 8.1 globulin 3.6 alt 129 alp 642 ggt 15 lipase 246 Epoc K+ 2.5 bun 49 creast 1.63 glucose 183 Flex 4 : negative X 4 Ua: rbc + 3+ cocci spgrav 1018
SEX	
MN	
AGE	
13yr	
WEIGHT	
2.8kg	
INTERPRETED BY	
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	The area of the aortic trifurcation was free of pathology. The area of the residual prostate appeared normal and free of pathology.
IMAGING PERFORMED BY	
Erin Wicks	
HOSPITAL NAME	
Shores Veterinary Emergency Center	
REFERRING VET	
Dr. Law	
INVOICE	
14259ag	
DATE	
06/30/2023	

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, mineral or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

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 3.6 cm in length. The right kidney measured 3.9 cm in length.

Adrenal Glands

The bilateral adrenal glands were enlarged in size with mild capsule asymmetry and homogenous hypoechoic parenchyma without mineralization. No overt adrenal tumors. The left adrenal gland measured 0.9 cm width at the caudal pole and 1.8 cm length. The right adrenal gland measured 0.7 cm width at the caudal pole and 1.4 cm length.

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.

Liver/Gallbladder

The liver presented enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a moderate coarse non-homogenous echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without



PATIENT	signs of congestion. The gallbladder was non-distended in size with primarily anechoic luminal content and mild non-organized variably hyperechoic sediment. The cystic and common bile ducts were normal.
Hercules Reinbold	
SPECIES	Gastrointestinal
Canine	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.
BREED	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. Non-specific segmental duodenojejunal mucosal speckling was present.
Chihuahua	Normal visible colon wall layers were present with apparent formed feces in lumen.
SEX	Pancreas
MN	The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.
AGE	Free Abdomen
13yr	No omental masses, overt lymphadenopathy or peritoneal effusion was present.
WEIGHT	Generalized minor increased omental echogenicity was present.
2.8kg	
INTERPRETED BY	ULTRASONOGRAPHIC FINDINGS
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	<ul style="list-style-type: none"> • Mild to moderate chronic renal changes. • Hepatopathy with mild non-homogenous parenchyma-vacuolar hepatopathy, inflammatory/immune mediated disease, hematopoiesis, hyperplasia, mild fibrosis, non-obstructive cholestasis or other hepatopathy possible. Neoplastic criteria considered less likely. • Gallbladder debris (non-mucocele). • Non-specific gastroenteritis pattern. • Heterogenous pancreas-not consistent with active pancreatitis. • Non-specific bilateral mildly irregular hypoechoic adrenomegaly.
IMAGING PERFORMED BY	INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS
Erin Wicks	Assuming normal clotting status a hepatic FNA for screening cytology is warranted for further assessment. A leptospirosis titer/PCR may be considered if clinically indicated or if potential exposure/endemic to the area.
HOSPITAL NAME	Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered.
Shores Veterinary Emergency Center	
REFERRING VET	Low grade pancreatitis which may present sonographically normal and non-specific gastroenteritis possible. A CBC pathology review may be considered.
Dr. Law	
INVOICE	Empirically, hospitalization with IVF, hepatic/GI support, empirical therapy for low grade/chronic pancreatitis with assessment of clinical response and monitoring of hepatic/renal parameters would be reasonable. Sonographic reassessment recommended if clinically indicated.
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PATIENT

Hercules Reinbold

SPECIES

Canine

BREED

Chihuahua

SEX

MN

AGE

13yr

WEIGHT

2.8kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Erin Wicks

HOSPITAL NAME

Shores Veterinary
Emergency Center

REFERRING VET

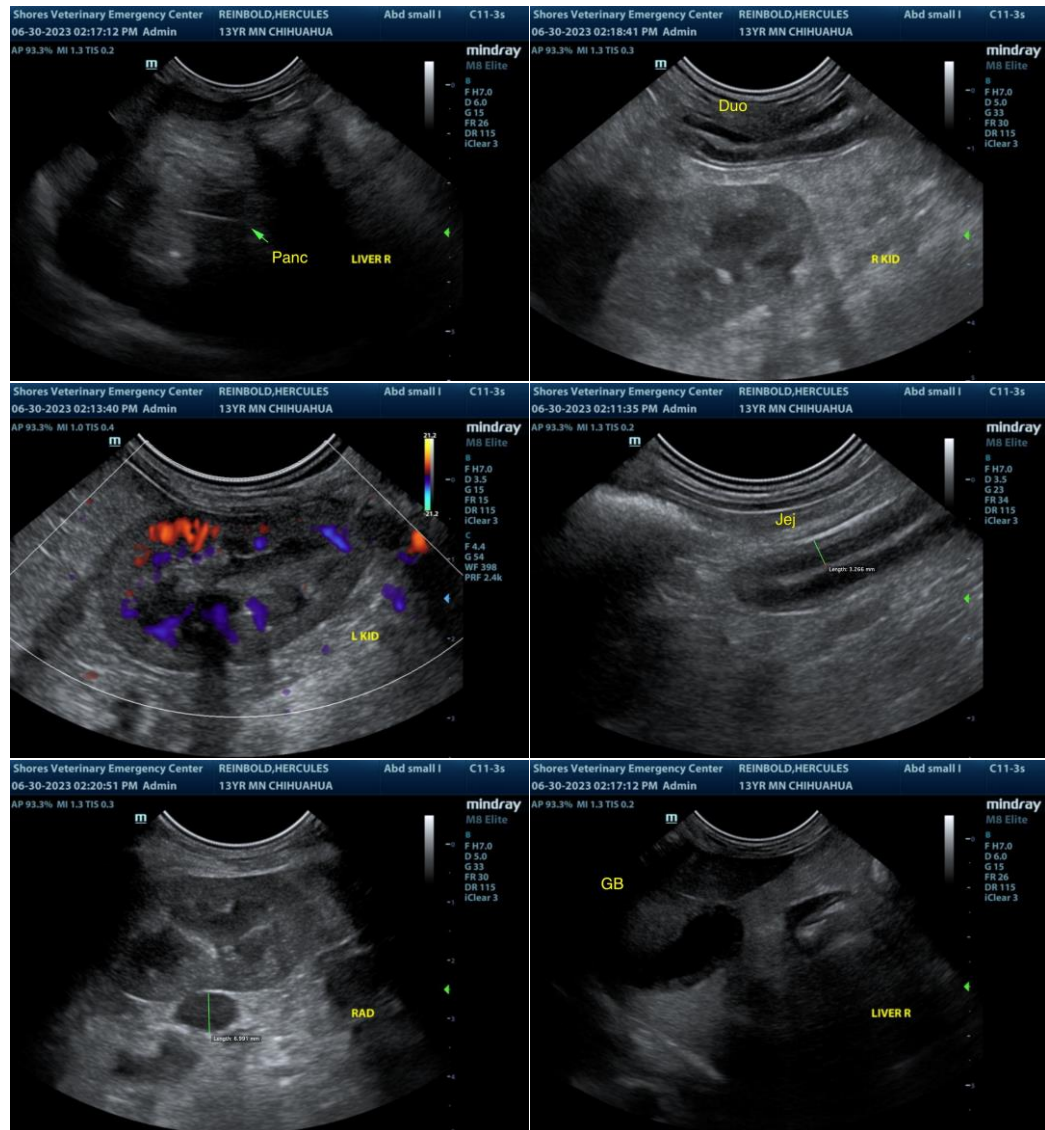
Dr. Law

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PATIENT

Hercules Reinbold

SPECIES

Canine

BREED

Chihuahua

SEX

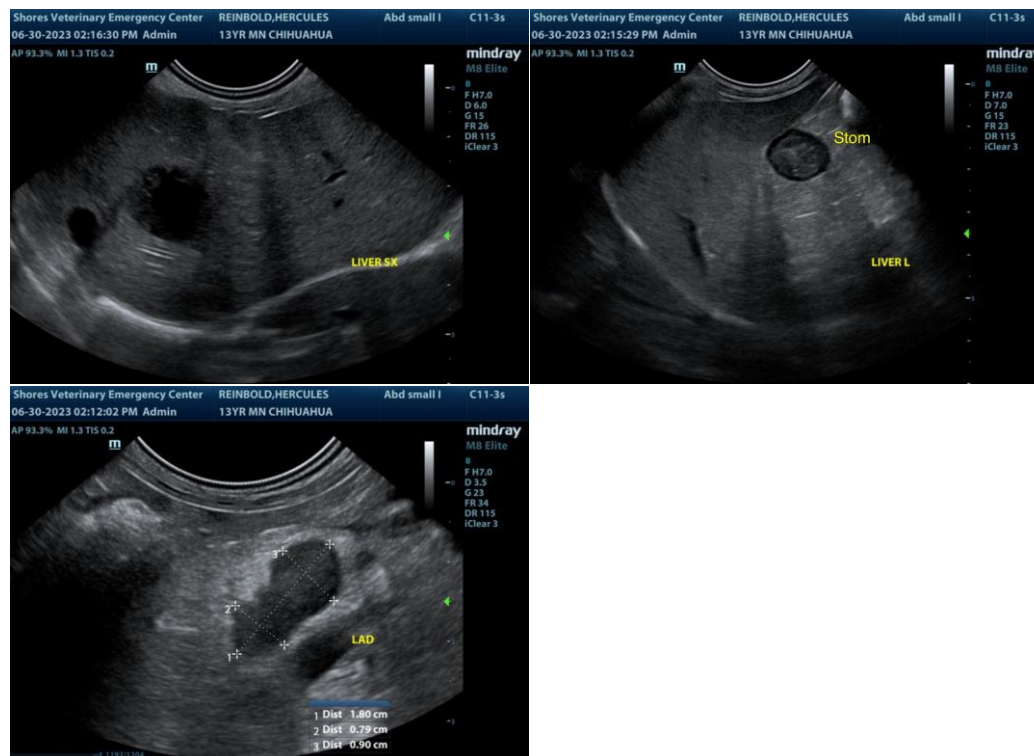
MN

AGE

13yr

WEIGHT

2.8kg



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.

IMAGING PERFORMED BY

Erin Wicks

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

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Emergency Center

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