



<b>PATIENT</b>	<b>PRESENTING CLINICAL SIGNS</b>
Bruiser Orth	<p>History of liver enzyme elevation, PU/PD History of atopy. e/d/u- WNL , some looser stools going on for about a year now, PE: overweight, dental disease, dermal and subcutaneous masses. Mobility challenges. June 2022 Normal ACTH stimulation with minimal change in ALT and hypercholesterolemia, but significant ALKP elevation within last 6 months - r/o hyperadrenocorticism vs hepatitis, neoplasia or other progressing hepatic disease Feb 2023 Normal LDDS with minimal change in ALT and hypercholesterolemia, but significant ALKP elevation within last 6 months - NOT consistent with HAC however possible false negative - r/0 vs hepatitis, neoplasia or other progressing hepatic disease. Low normal thyroid History of diffuse hepatopathy</p> <p>Abnormal PE/Chem/CBC/UA Results: 2/2023 LDDS test - Resting cortisol - 1.5 (1-5) 4hr cortisol - 0.5 (0-1.4) 8hr cortisol - 1.4 (0-1.4) 1/31/23 Chemistry profile - Superchem from 1/28/23 ALT 204 (12-118) ALP 1715 (5-131) Cholesterol 413 (92-324) Precision PSL 290 (24-140) Superchem: from 6/16/22 wnl except ALT (SGPT) 231 (12 - 118 IU/L) Alk Phosphatase 2124 (5 - 131 IU/L) CHOLESTEROL 458 (92 - 324) Superchem: from 12/2/21 wnl except - TP 7.6 (5-7.4) - globulin 3.7 (1.6-3.6) - ALT 377 (12-118) - ALP 640 (5-131) - cholesterol 444 (92-324) - precision PSL 165 (24-140) Liver chems: - From 6/26/21 - ALT 339 (12-118)- - ALP 468 (5-131) - cholesterol 417 (92-324) Liver chems: - From January 2021 - ALT 279 (12-118)-- last checked 9/2020- ALT- 298 - ALP 329 (5-131) -- last checked 9/2020- ALP 197 - cholesterol 407 (92-324); Accuplex - Heartworm (Antigen) NEGATIVE Borrelia burgdorferi NEGATIVE Ehrlichia canis NEGATIVE Anaplasma phagocytophilum NEGATIVE; CBC - Wnl; Thyroid hormones - TT4 0.8 (0.8-3.5); Urinalysis - USG 1.030 pH 7.5 urine chems: 3+ pro urine sedi: nsf MA: &gt;30 (&lt;2.5); Keyscreen PCR - All undetected</p>
<b>SPECIES</b>	
Canine	
<b>BREED</b>	
Shar Pei Mix	
<b>SEX</b>	
M/N	
<b>AGE</b>	
12y 9m	
<b>WEIGHT</b>	
98.2 lbs.	
<b>INTERPRETED BY</b>	
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	
<b>IMAGING PERFORMED BY</b>	<b>ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN</b>
Carly Pate	<b>Urinary System</b>
	The urinary bladder, trigone, and cystourethral junction 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.
<b>HOSPITAL NAME</b>	The area of the aortic trifurcation was free of pathology.
VCA McKenzie AH	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 evidence of pelvic dilation was present. The left kidney measured 7.8 cm in length. The right kidney measured 7.6 cm in length.
<b>REFERRING VET</b>	
Dr. Arpaia	<b>Adrenal Glands</b>
<b>INVOICE</b>	The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.79 cm width at the caudal pole and 0.91 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 0.69 cm width at the caudal pole and 0.87 cm width at the cranial pole. No adrenal tumors were noted.
16435	
<b>DATE</b>	
3/22/23	



**PATIENT**

***Spleen***

Bruiser Orth

The spleen was normal in size and contour with a finely textured homogeneous parenchyma exhibiting multiple, variably sized, well-demarcated, hyperechoic, nondisruptive splenic nodules. The nodules are sonographically consistent with benign myelolipomas with potential for emerging areas of mineralization.

**SPECIES**

Canine

**BREED**

Shar Pei Mix

***Liver/ Gallbladder***

The liver exhibited mild to possible moderate enlargement yet maintained symmetrical capsule contour. Normal to subtle mixed echogenic hepatic parenchyma echogenicity exhibiting moderate coarse echotexture was present with evidence of minor parenchyma remodeling. Normal hepatic vascular volume was noted. No visualized hepatic intraparenchymal masses or nodules were noted. The gallbladder was non-distended in size containing anechoic content with minor hyperechoic gallbladder debris. No evidence of gallbladder or peripheral gallbladder inflammatory criteria was noted. The cystic and common bile ducts were normal.

**SEX**

M/N

**AGE**

12y 9m

***Gastrointestinal***

**WEIGHT**

98.2 lbs.

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained mild subtle progressively shadowing ingesta, sonographically consistent with food, without signs of obstruction or foreign material. The stomach was otherwise normal. No evidence of mechanical pyloric outflow obstruction was noted.

**INTERPRETED BY**

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

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.

**IMAGING PERFORMED BY**

Carly Pate

***Pancreas***

The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum, likely consistent with age-related pancreatic changes and incidental. No sonographic evidence of active or chronic pancreatic inflammatory criteria.

**HOSPITAL NAME**

VCA McKenzie AH

***Free Abdomen***

No overt lymphadenopathy or peritoneal effusion was present.

**REFERRING VET**

Dr. Arpaia

**ULTRASONOGRAPHIC FINDINGS**

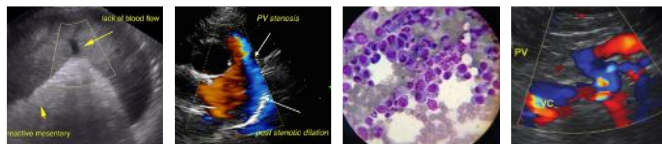
**INVOICE**

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- Mild chronic renal changes - static
- Static hepatopathy - subjectively benign
- Minor gallbladder debris (non-mucocele)
- Normal bilateral adrenals - no evidence of adrenal tumors or overt adrenomegaly
- Sonographically unremarkable gastrointestinal tract with mild gastric ingesta
- Minor remodeled pancreas



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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

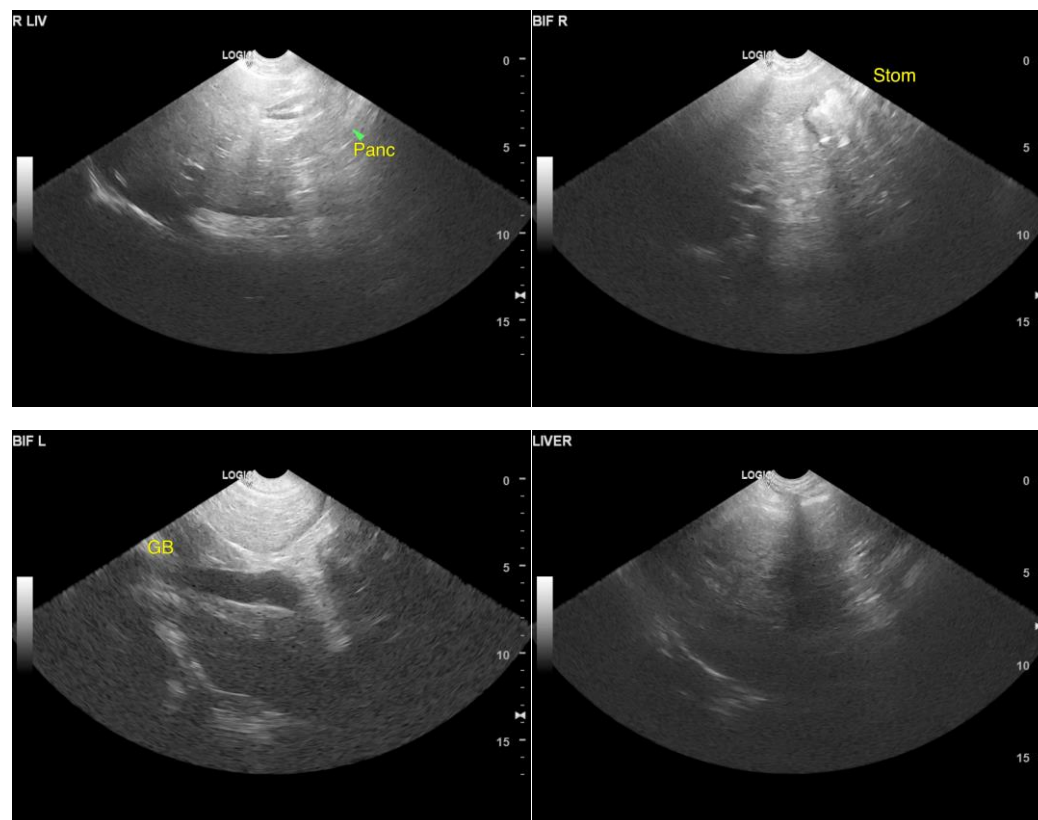
Overall, similar abdominal presentation compared to the previous study without evidence of progressive hepatobiliary, pancreatic, gastrointestinal, or renal pathology.

Sonographically, the appearance of the liver was consistent with benign hepatopathy with potential considerations including vacuolar hepatopathy, inflammatory / immune-mediated disease, hyperplasia, hematopoiesis, minor fibrosis, or other hepatopathy. Hepatic sampling would be required for further clarification.

Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered. If not currently instituted, hepatosupportive medications including Denamarin and Ursodiol may prove beneficial. Given hepatopathy with a history of PU/PD and most recent LDDST, an internal medicine consult may be considered.

For an additional charge, internal medicine consult can be utilized through SonoPath.com. You can select the internal medicine drop down at <http://spa.sonopath.com/>.

One of the world's top internists & SonoPath associate Dr. Remo Lobetti BVSc, MMedVet, PhD, DECVIM can evaluate your case through SonoPath. <https://sonopath.com/resources/sonopath-services/internal-medicine-teleconsultation-services>





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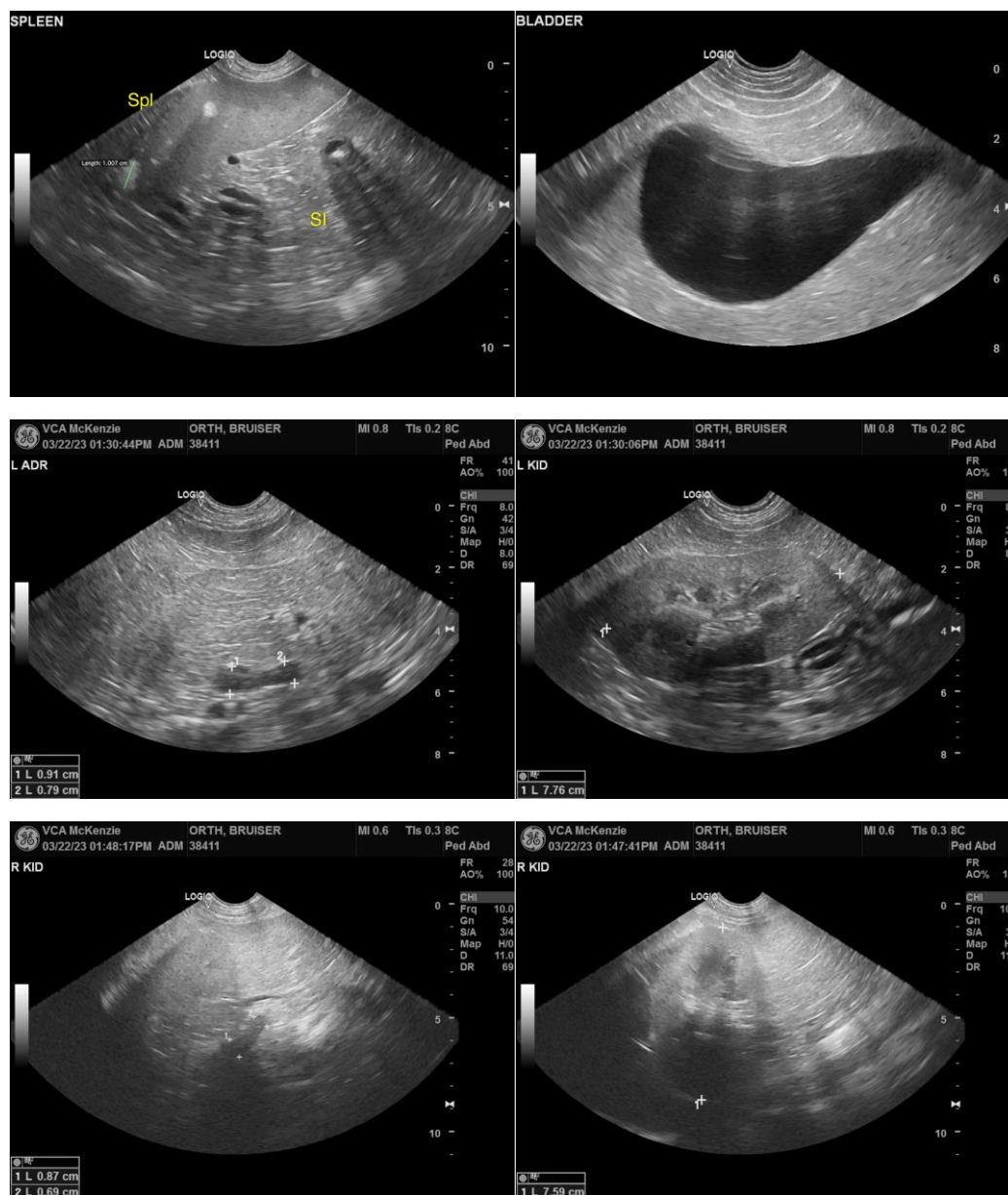
Dr. Arpaia

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**DATE**

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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.

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