



<b>PATIENT</b>	<b>PRESENTING CLINICAL SIGNS</b>
Abby Joyce	Distended abdomen, hepatomegaly Abnormal PE/Chem/CBC/UA Results: ALT 405, ALP 1091, GGT 117
<b>SPECIES</b>	<b>ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN</b>
Canine	<i>Urinary System</i>
<b>BREED</b>	The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 cm exhibited normal thickness and tone. Primarily anechoic urine was present in the lumen. Moderate particulate nondependent sediment was present without evidence of calculus formation. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic mural changes were noted.
Shih Tzu Mix	
<b>SEX</b>	No evidence of pathology in the area of the aortic trifurcation.
FS	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 moderate loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. Mild to moderate non-obstructive medullary mineralization was present in both kidneys. The left kidney measured 4.5 cm in length. The right kidney measured 4.5 cm in length.
<b>AGE</b>	
12 Years	
<b>WEIGHT</b>	<i>Adrenal Glands</i>
16.5 lbs	The left adrenal gland exhibited generalized enlargement and mild asymmetrical capsule contour with hypoechoic to mildly nonhomogeneous nonmineralized parenchyma. The left adrenal gland measured 2.9 cm length x 1.5 width at the caudal pole and 0.95 cm width at the cranial pole.
<b>INTERPRETED BY</b>	The right adrenal gland was indistinctly visualized owing to isoechoic parenchyma compared to adjacent tissue. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The right adrenal gland measured 0.7 cm width in the cranial pole and 0.69 cm width in the caudal pole.
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	
<b>IMAGING PERFORMED BY</b>	<i>Spleen</i>
Jessica Miller	The spleen exhibited primarily finely textured parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Multifocal pinpoint hyperechoic parenchyma foci and minor hyperechoic striations present in the spleen. These are nonspecific yet likely benign and potentially indicative of areas of microinfarction, emerging mineralization, or fibrosis. 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.
<b>HOSPITAL NAME</b>	
Cresskill AH	
<b>REFERRING VET</b>	<i>Liver/ Gallbladder</i>
Dr. Khodari	The liver exhibited nonuniform increased parenchyma echogenicity compared to the falciform fat and spleen. Focal thinly walled parenchymal cyst was noted in the ventral liver lobes containing anechoic fluid. The cyst measured approximately 1.2 cm diameter. An indistinct nodular mass lesion was noted in the deep mid to right liver measuring approximately 5.7 cm in diameter. The echotexture of the liver parenchyma was uniform with a mild coarse echotexture. The capsule of the liver was symmetrical in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion.
<b>INVOICE</b>	
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<b>DATE</b>	
8-23-21	



<b>PATIENT</b>	The gallbladder exhibited mild subjective distension, yet the gallbladder walls were sonographically unremarkable and without overt evidence of cholecystic or pericholecystic inflammation, with echogenic, nonmineralized, non-dependent biliary sludge. The biliary sludge was non organized with a hypoechoic to anechoic, irregular to interrupted rim visible between the nondependent sludge and inner wall. No signs of peripheral inflammation.
Abby Joyce	
<b>SPECIES</b>	<b><i>Gastrointestinal</i></b>
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.
<b>BREED</b>	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.
Shih Tzu Mix	
<b>SEX</b>	Normal visible colon wall layers were present with apparent formed feces in lumen.
FS	<b><i>Pancreas</i></b>
<b>AGE</b>	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.
12 Years	<b><i>Free Abdomen</i></b>
<b>WEIGHT</b>	No overt lymphadenopathy or peritoneal effusion was present.
16.5 lbs	<b>ULTRASONOGRAPHIC FINDINGS</b>
<b>INTERPRETED BY</b>	<ul style="list-style-type: none"> <li>• Urinary bladder sediment.</li> <li>• Chronic renal changes with nonobstructive medullary mineralization.</li> <li>• Left adrenomegaly.</li> <li>• Hepatomegaly with generalized parenchyma hyperechogenicity, focal parenchymal cyst, and indistinct nodular mass lesion in deep mid to right liver.</li> <li>• Partial/emerging gallbladder mucocele - subjectively noninflamed.</li> </ul>
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	
<b>IMAGING PERFORMED BY</b>	<b>INTERPRETATION OF THE FINDINGS &amp; FURTHER RECOMMENDATIONS</b>
Jessica Miller	The urinary bladder sediment may suggest cellular / crystalline debris or mucus. Cystocentesis for UA +/- C/S if evidence of inflammatory cells is recommended.
<b>HOSPITAL NAME</b>	The left adrenomegaly may indicate indistinct adenomatous change or hyperplasia. Possibility of emerging left adrenal tumor is possible yet considered less likely. Full adrenal workup including LDDST and systemic blood pressure to assess for evidence of hypertension may be considered if clinically indicated.
Cresskill AH	
<b>REFERRING VET</b>	The appearance of the liver was nonspecific but may indicate steroid or other vacuolar hepatopathies, chronic hepatitis/cholangiohepatitis, lipidosis, or fibrosis with parenchymal remodeling, nodular/regenerative hyperplasia or hematopoiesis, while round cell hepatic neoplasia cannot be excluded. Assuming normal coagulation parameters, ultrasound guided FNA of the liver using a 25-gauge needle would be warranted for cytology, primarily to assess for evidence of inflammatory cells and to rule out round cell neoplasia. Vitamin K administration would be suggested prior to FNA if elected.
Dr. Khodari	
<b>INVOICE</b>	Pending hepatic cytology, hepatosupportive medications including denamarin and ursodiol are suggested with continued monitoring for evidence of continued or increase in cholestasis. Recheck
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**PATIENT**

Abby Joyce

sonogram suggested if increase in cholestasis or evidence of cranial abdominal or subxiphoid discomfort on palpation.

**SPECIES**

Canine

**BREED**

Shih Tzu Mix

**SEX**

FS

**AGE**

12 Years

**WEIGHT**

16.5 lbs

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Jessica Miller

**HOSPITAL NAME**

Cresskill AH

**REFERRING VET**

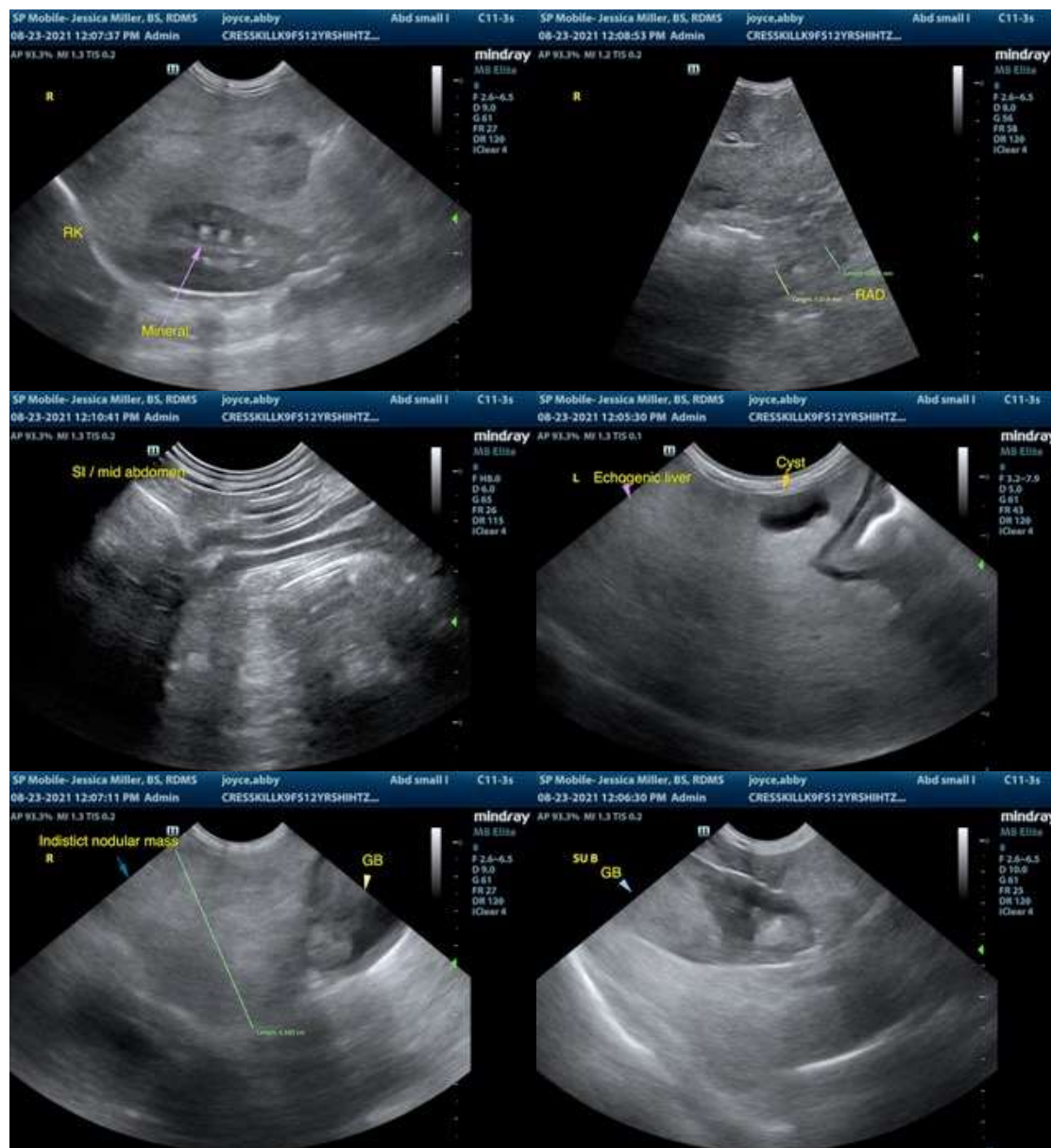
Dr. Khodari

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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.

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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