



PATIENT	PRESENTING CLINICAL SIGNS
Jack Stephens	diagnosed with pancreatitis, rads reviewed by Sonopath, rec US meds: metronidazole, ampicillin, cerenia Abnormal PE/Chem/CBC/UA Results: elevated GGT, ALP Tbil, Glovb chol, cPLI >300 low cl
SPECIES	ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
Canine	Urinary System
BREED	The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.
Chihuahua	
SEX	The are of the prostate is examined without evident pathology.
Neutered Male	Kidneys are overall normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of pyelectasia, mineral or infarcts observed. The left kidney measures 4.04 cm. The right kidney measures 4.32 cm.
AGE	Adrenal Glands
8 Years	The right adrenal gland is normal in size (1.8 cm long x 1.29 cm at the cranial pole and 0.71 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.
WEIGHT	The left adrenal gland is normal in size (1.46 cm long x 0.45 cm at the cranial pole and 0.43 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.
8.4 Pounds	
INTERPRETED BY	Spleen
Beth Johnson, DVM DACVIM	Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). Multifocal well-demarcated hyperechoic homogenous nodules are noted. Splenic vasculature appears normal.
IMAGING PERFORMED BY	Liver
Kelly Reschny	Liver is subjectively enlarged with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion.
HOSPITAL NAME	REFERRING VET
St. Catharine's AH	Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.
REFERRING VET	Gastrointestinal
Dr. Boctor	The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.
INVOICE	DATE
40171	The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions
DATE	
8/4/22	



PATIENT	per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.
Jack Stephens	The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.
SPECIES	Pancreas
Canine	The observed pancreas is prominent (enlarged) in size, hypoechoic to surrounding tissue and irregular in shape with a swollen undulating contour. Enhanced hyperechoic ill-defined surrounding fat is noted.
BREED	Free Abdomen
Chihuahua	There is no evidence of free peritoneal effusion noted in these images.
SEX	There is no apparent lymphadenopathy noted in these images.
Neutered Male	PRIMARY FINDINGS
AGE	<ul style="list-style-type: none"> Acute pancreatitis Heterogenous Liver – These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia. Just cranial/deep to the gallbladder, the liver takes on a more prominent nodular, almost emerging mass-like appearance. Gallbladder debris - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.
8 Years	SECONDARY FINDINGS
WEIGHT	<ul style="list-style-type: none"> Age related kidney change Hyperechoic splenic nodules – most consistent with benign myelolipomas. Other differentials such as fibrosis or calcification caused by old hematomas or infarcts, chronic inflammation, granulomatous disease or metastatic disease cannot be ruled out, but are considered less likely.
8.4 Pounds	INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS
INTERPRETED BY	Medical management of pancreatitis with anti-emetics, gastroprotectants, appetite stimulants or nutritional support as needed, pain management, broad spectrum antibiotics, and fluid therapy is recommended. If possible, a fresh frozen plasma transfusion and hyperbaric oxygen therapy (HBOT) could be beneficial. Monitoring of the pancreas with power doppler is recommended to identify possible necrosis as well as other potential sequelae such as abscesses, etc.
Beth Johnson, DVM DACVIM	Following management of pancreatitis and patient stabilization, a fine needle aspirate of the liver is recommended if patient's coagulation status is appropriate, paying special attention to the described nodular area.
IMAGING PERFORMED BY	
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PATIENT

Jack Stephens

SPECIES

Canine

BREED

Chihuahua

SEX

Neutered Male

AGE

8 Years

WEIGHT

8.4 Pounds

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Beth Johnson, DVM
DACVIM

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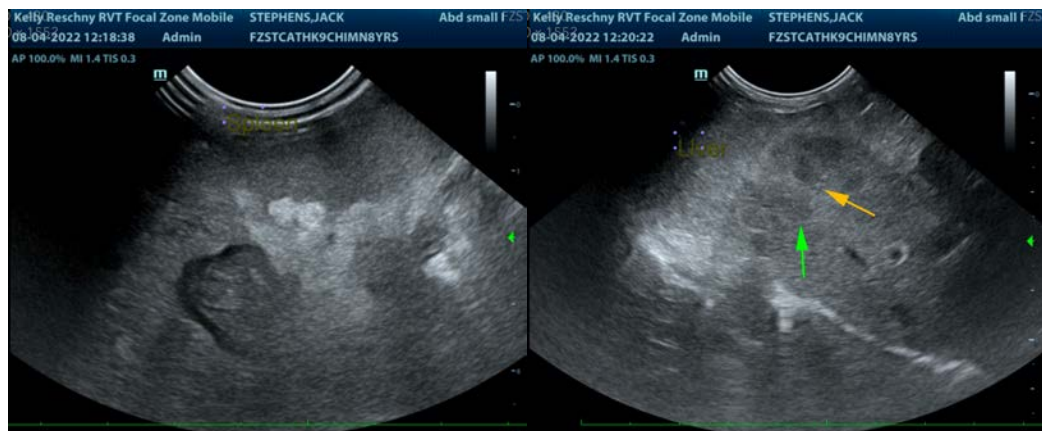
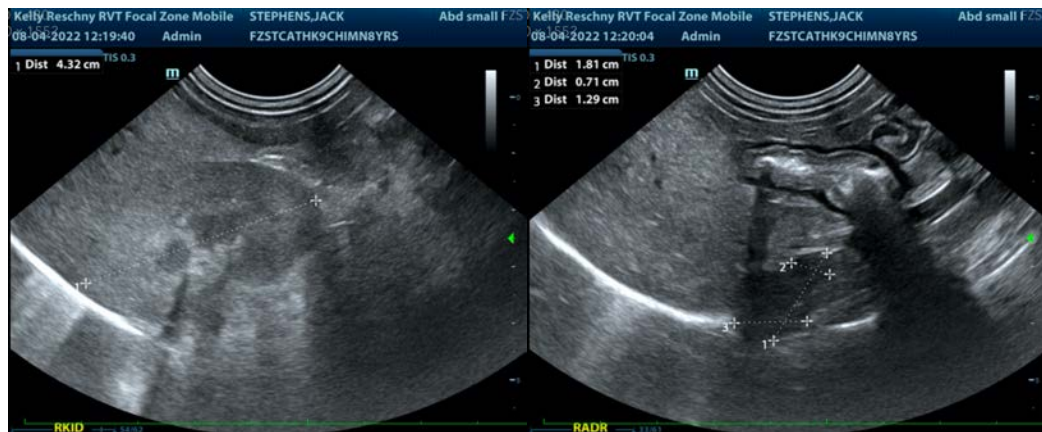
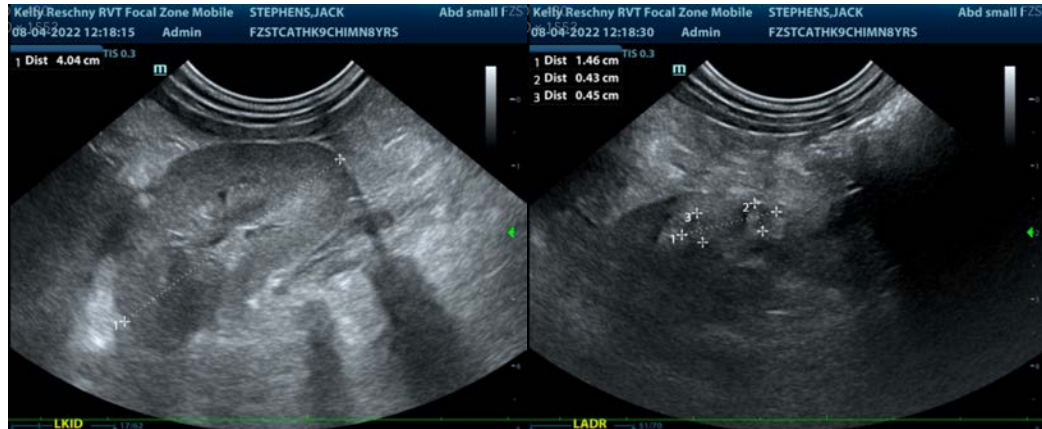
Dr. Boctor

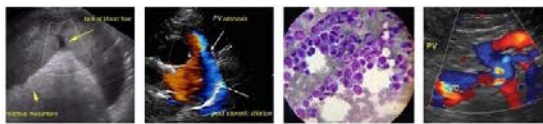
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PATIENT

Jack Stephens

SPECIES

Canine

BREED

Chihuahua

SEX

Neutered Male

AGE

8 Years

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8.4 Pounds

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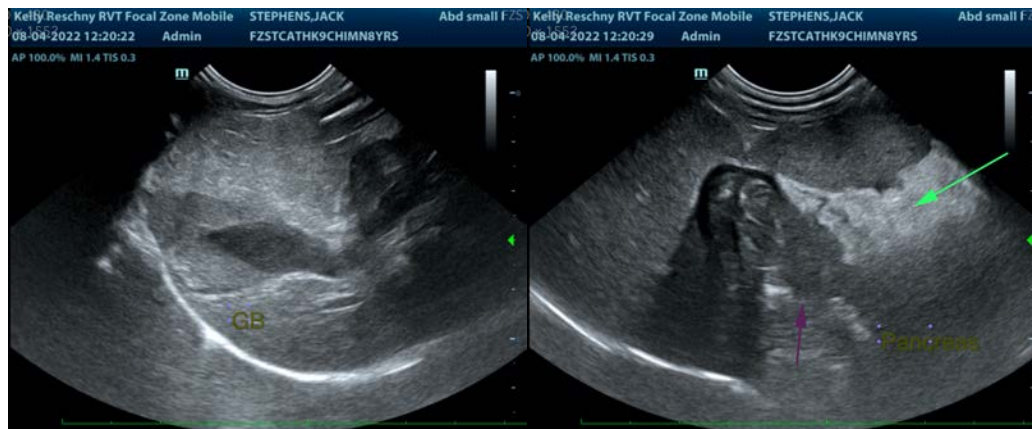
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Beth Johnson, DVM, DACVIM
Beth.Johnson@sonopath.com