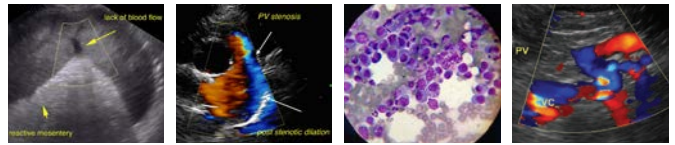
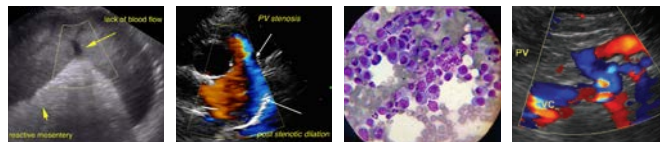


PATIENT	PRESENTING CLINICAL SIGNS
Tigger Swanson	Clinically doing well at home - AUS performed due to liver enzymes trending upwards over the last year. Started on Vetmedin for cardiac enlargement last February. No other medications at home. Recently has been ingesting greasy/fatty food at home per owner.
SPECIES	
Canine	Abnormal PE/Chem/CBC/UA Results: 8/14/23 - AST 74, ALT 350, ALP 1181 8/8/22- ALT 239, ALP 1055 2/16/22- ALT 173, ALP 1025
BREED	ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
Chihuahua	Urinary System
SEX	Urinary bladder is adequately distended. It has a normal uniform wall thickness. Contents include primarily anechoic fluid with occasional echogenic non-shadowing debris, most consistent with exfoliated cells, mucous and/or small blood clots. Both sterile inflammation as well as urinary tract infection can also present with echogenic debris. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.
Neutered Male	
AGE	The area of the prostate is examined without evident prostatic pathology.
14 Years	
WEIGHT	The right kidney is normal in size (5.07 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed. A subtle hyperechoic band parallel to the corticomedullary border is present.
16.84 Pounds	
INTERPRETED BY	The left kidney is normal in size (5.08 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed. A subtle hyperechoic band parallel to the corticomedullary border is present.
Beth Johnson, DVM DACVIM	
IMAGING PERFORMED BY	Adrenal Glands
Dr. Aaron Deml	The right adrenal gland is unable to be well visualized in these images.
HOSPITAL NAME	The left adrenal gland is normal in size (0.45 cm at the cranial pole and 0.49 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.
Craig Road AH	
REFERRING VET	Spleen
Dr. Sarah Jansen	The 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). No focal nodules or masses are observed. Splenic vasculature appears normal.
INVOICE	Liver
44867	The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. A 1.7 cm x 2.3 cm homogeneous, primarily hyperechoic nodule/mass is noted in the deep mid liver. Visible vasculature and biliary tree appear normal without distension or congestion.
DATE	
8/23/23	



PATIENT	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.
Tigger Swanson	
SPECIES	Gastrointestinal
Canine	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.
BREED	
Chihuahua	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 per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.
SEX	
Neutered Male	The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.
AGE	Pancreas
14 Years	The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.
WEIGHT	Free Abdomen
16.84 Pounds	There is no evidence of free peritoneal effusion noted in these images.
INTERPRETED BY	There is no apparent lymphadenopathy noted in these images.
Beth Johnson, DVM DACVIM	
IMAGING PERFORMED BY	ULTRASONOGRAPHIC FINDINGS
Dr. Aaron Deml	<ul style="list-style-type: none"> Liver nodule- Differentials for a discrete liver nodule include primarily benign changes such as nodular hyperplasia, fibrosis of an old hematoma, granuloma, myelolipoma, etc.; however, while considered less likely, primary hepatic neoplasia, infiltrative round cell neoplasia and metastatic disease can mimic benign lesions and cannot be definitively ruled out. Moderate 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. Subtle bilateral medullary rim sign - This finding is of unknown clinical significance and can be a normal variant, often idiopathic. Medullary rim sign can be present with renal disease including FIP, lymphoma, hypercalcemic nephropathy, Leptospirosis, tubular disease, other and should be interpreted in combination with other more specific indications of kidney disease such as isosthenuria, proteinuria, azotemia, etc. This is a common incidental finding in patients with diabetes mellitus. Urinary bladder debris
HOSPITAL NAME	
Craig Road AH	
REFERRING VET	
Dr. Sarah Jansen	
INVOICE	
44867	
DATE	
8/23/23	



PATIENT

Tigger Swanson

SPECIES

Canine

BREED

Chihuahua

SEX

Neutered Male

AGE

14 Years

WEIGHT

16.84 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Dr. Aaron Deml

HOSPITAL NAME

Craig Road AH

REFERRING VET

Dr. Sarah Jansen

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DATE

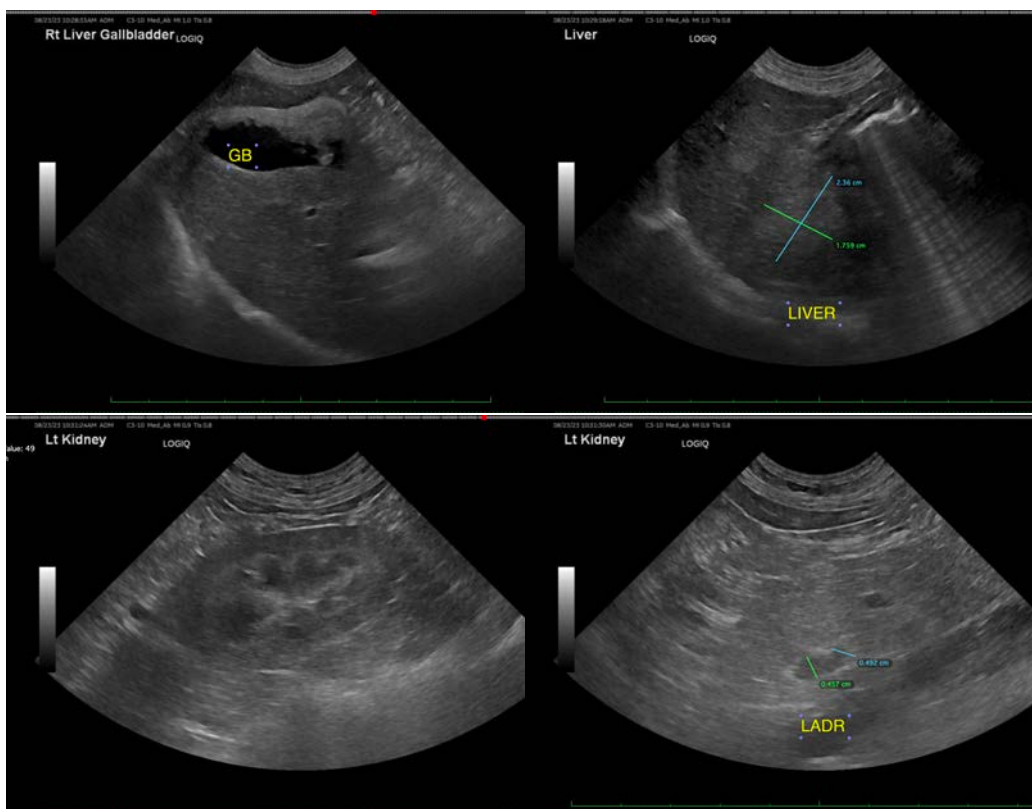
8/23/23

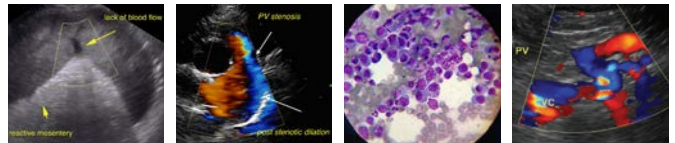
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.

While the appearance of the liver nodule trends in appearance toward benign, tissue sampling could be considered beginning with a fine needle aspirate of the nodule if patient's coagulation status is appropriate. Alternatively, ultrasonographic monitoring could be considered to help determine progression versus lack thereof.

In the meantime, given the patient's reported liver enzyme increases and gallbladder sludge, empirical hepatic nutraceuticals including Ursodiol could be considered. If while on Ursodiol liver enzymes improve, Ursodiol can be continued long-term. However, continuation isn't necessary without noted improvement.





PATIENT

Tigger Swanson

SPECIES

Canine

BREED

Chihuahua

SEX

Neutered Male

AGE

14 Years

WEIGHT

16.84 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

**IMAGING
PERFORMED BY**

Dr. Aaron Deml

HOSPITAL NAME

Craig Road AH

REFERRING VET

Dr. Sarah Jansen

INVOICE

44867

DATE

8/23/23



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
info@sonopath.com