



**PATIENT PRESENTING CLINICAL SIGNS**

**PATIENT** Shadow Meyer  
**SPECIES** History: Shadow presented for a dental cleaning and elevated liver values were noted at that time. The dental was postponed and pet are on the flowing medications at home. On amoxicilin, metronidazole, dasaquin and denamarin. Lepto test was negative. On 6/9 liver values had returned to normal. Today liver values were elevated again. Ultrasound to look for cause of elevations.

Canine  
 Abnormal PE/Chem/CBC/UA Results: 5/6: ALT=583 (10-125) ALP=556 (23-212) GGT=33 (0-11)  
 6/3: ALT=55 (10-125) ALP=307 (23-212) 6/20: ALT=217 (10-125) ALP=289 (23-212)

**BREED ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Golden Retriever

**Urinary System**

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.

**SEX**

FS

Right kidney is normal in size (6.25 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.

**AGE**

9.5 yr

Left kidney is normal in size (7.27 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.

**WEIGHT**

86

**Adrenal Glands**

Right adrenal gland is unable to be fully visualized in these images, no pathology is noted in the area.

**INTERPRETED BY**

Left adrenal gland is normal in size (0.68 cm at cranial pole and 0.84 cm at caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Beth Johnson, DVM  
 DACVIM

**Spleen**

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.

**IMAGING**

**PERFORMED BY**

M. Kermendy CVT

**Liver**

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. An approximately 10 cm x 8 cm relatively homogeneous/solid hypoechoic mass with a few small cavitations was present in the mid caudal liver. Visible vasculature and biliary tree appear normal without distension or congestion.

**HOSPITAL NAME**

Wauwatosa Veterinary  
 Clinic

**REFERRING VET**

Dr. Jamie Oakes

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

**Gastrointestinal**

**INVOICE**

10860ag

The stomach wall is normal in thickness (canine < 0.5 cm) and layering. The lumen of the stomach is mildly distended with very echogenic reverberation artifact from intraluminal gas. There is no evidence of obstruction, foreign material or infiltrative disease; however, complete visualization of far wall is partially inhibited by gas. Pyloric outflow tract appears patent.

**DATE**

06/20/2022

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 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.



**PATIENT**

Shadow Meyer

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

**SPECIES**

Canine

**Pancreas**

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.

**BREED**

Golden Retriever

**Free Abdomen**

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

**ULTRASONOGRAPHIC FINDINGS**

**SEX**

FS

- A focal solid liver mass most consistent with infiltrative neoplasia such as hepatocellular carcinoma or less likely sarcoma or round cell neoplasia

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**AGE**

9.5 yr

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.

**WEIGHT**

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A FNA of the liver mass could be considered if the patient's coag status is appropriate. However ideally excisional biopsy/mass removal via surgical laparotomy would be pursued given the long term risks of hemorrhage, necrosis etc. from even a benign partially cavitated mass. Based on these imaged, the mass is likely fully excisable however a presurgical planning abdominal CT could be considered for more definitive planning.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING PERFORMED BY**  
M. Kermendy CVT

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**REFERRING VET**

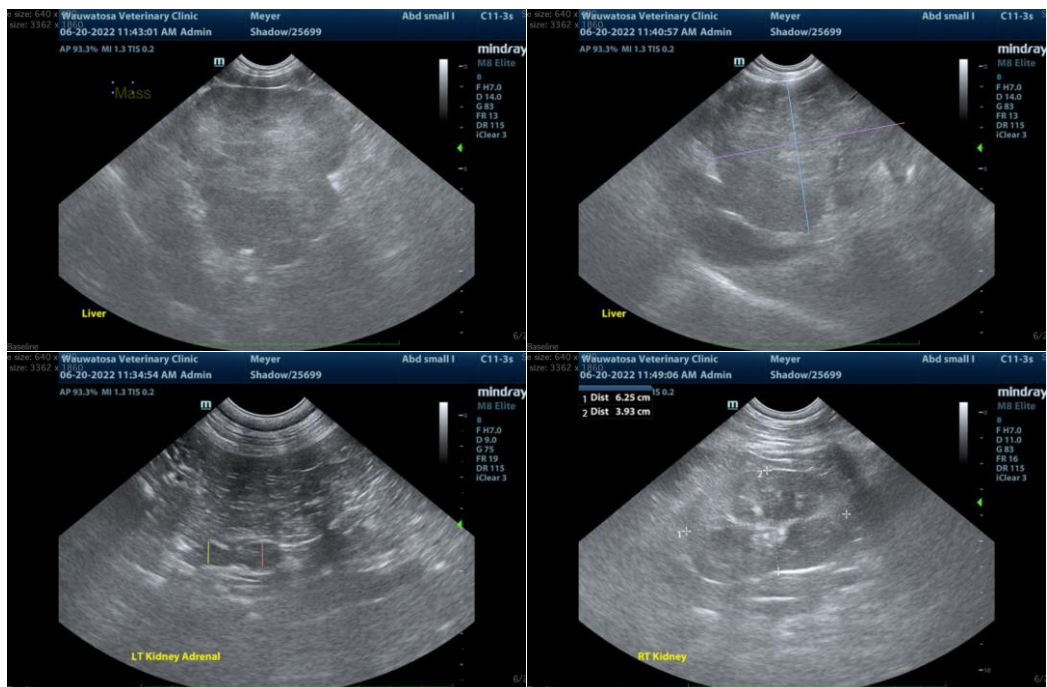
Dr. Jamie Oakes

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**PATIENT**

Shadow Meyer

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.

**SPECIES**

Canine

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**

**BREED**

Golden Retriever

Beth.Johnson@SonoPath.com

**SEX**

FS

**AGE**

9.5 yr

**WEIGHT**

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**INTERPRETED BY**

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