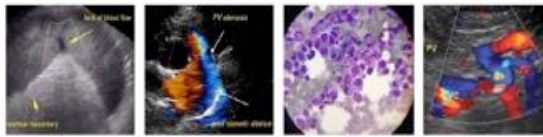
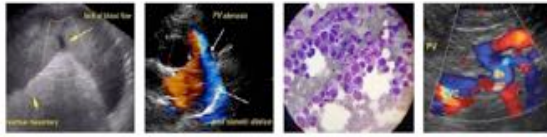


<b>PATIENT</b>	<b>PRESENTING CLINICAL SIGNS</b>
Maggie May Hainer	History: mass seen on rads in cranial abd
<b>SPECIES</b>	<b>ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN</b>
Canine	<b>Urinary System</b>
<b>BREED</b>	The urinary bladder is well distended with anechoic contents. The wall is smooth and regular. No abnormalities are noted with the trigone or proximal urethra, and there is no evidence of sediment, cystoliths, polyps or a mass.
Shih Tzu	
<b>SEX</b>	<b>Kidneys</b>
Spayed Female	The <b>left</b> kidney measures 4.38 cm. The capsule is smooth, however, the cortex is mildly hyperechoic and a mild to moderate loss of the normal definition of the cortico-medullary junction is present. A rectangular shaped, severely hyperechoic, cortical lesion is observed at the antimesenteric border of the cortex. The latter is in addition to the diffuse hyperechogenicity of the cortex. The hyperechoic region is suggestive of an ischemic infarct and/or insult with fibrosis. Blood flow in the region is absent when evaluated with colour Doppler. Blood flow elsewhere is within normal limits. Mineralizations of the diverticulae and pelvis are present, without evidence of nephroliths or pyelectasia. An accumulation of intrapelvic fat is noted. The surrounding mesentery is mildly hyperechoic.
<b>AGE</b>	
14 years	
<b>WEIGHT</b>	
10 lbs	The <b>right</b> kidney measures 4.64 cm. The capsule is smooth, however, the cortex is mildly hyperechoic and a mild loss of the normal definition of the cortico-medullary junction is present. Mineralizations of the diverticulae and pelvis are present, without evidence of nephroliths or pyelectasia. An accumulation of intrapelvic fat is noted. Blood flow is within normal limits. The surrounding mesentery is mildly hyperechoic.
<b>INTERPRETED BY</b>	<b>Aortic bifurcation/trifurcation</b>
Lisa Carioto, DVM, DVSc, Diplomate ACVIM	No abnormalities observed.
<b>IMAGING PERFORMED BY</b>	<b>Adrenal Glands</b>
Kelly Reshny, RVT	The <b>left</b> adrenal gland measures 0.58 cm (high normal for a dog of Maggie May's stature) at the cranial pole, 0.43 cm at the caudal pole and 1.95 cm in length. No abnormalities are noted with the gland's overall architecture, echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.
<b>HOSPITAL NAME</b>	
Oxford County VC	The <b>right</b> adrenal gland measures 0.61 cm (very mildly increased for a dog of Maggie May's stature) at the cranial pole, 0.34 cm at the caudal pole and 1.60 cm in length. No abnormalities are noted with the gland's overall architecture, echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.
<b>REFERRING VET</b>	
Dr. Halfon	
<b>INVOICE</b>	<b>Spleen</b>
30058	
<b>DATE</b>	
5/2/22	



<b>PATIENT</b>	The spleen is within normal limits in size, architecture, echotexture, and echogenicity. The capsule is smooth. No abnormalities are observed with its vasculature, i.e. congestion and thrombi are not identified.
Maggie May Hainer	
<b>SPECIES</b>	<b>Liver</b>
Canine	Hepatomegaly with rounded borders and evidence of a mass with scalloped, lobulated borders. Other regions of the liver appear homogeneous, but have rounded borders. Its echogenicity may be mildly hyperechoic. No obvious abnormalities are observed with the hepatic vessels visualized.
<b>BREED</b>	
Shih Tzu	A very mildly heterogeneous mass, measuring 8.84 cm in diameter x 10.20 cm, is observed upon evaluation of the left liver. The mass varies in degrees of hyperechogenicity. The center is mildly hypoechoic in comparison to the outer regions. An occasional anechoic area is noted, which appears to be a blood vessel. The mass is vascularized (colour Doppler). The mass appears multilobulated in certain views. The gallbladder is visualized lateral to the mass.
<b>SEX</b>	
Spayed Female	The gallbladder wall is within normal limits in thickness and echogenicity. There is no evidence of echogenic material within the GB or edema surrounding it. The portions of the cystic and/or common bile ducts observed are not dilated or tortuous, i.e. there are no signs of an obstruction.
<b>AGE</b>	
14 years	
<b>WEIGHT</b>	<b>Gastrointestinal</b>
10 lbs	The gastric wall is within normal limits in thickness and the wall layers are well defined. No obvious abnormalities are observed with its peristalsis.
<b>INTERPRETED BY</b>	The small intestinal wall thickness, including the duodenum, is within normal limits and the definition of the wall layers is preserved. Abnormally dilated loops of bowel are not observed.
Lisa Carioto, DVM, DVSc, Diplomate ACVIM	The colonic wall is not thickened and mural detail is considered normal.
<b>IMAGING PERFORMED BY</b>	<b>Pancreas</b>
Kelly Reshny, RVT	A small portion of the left limb is visualized; no overt abnormalities are observed. The surrounding mesentery is hyperechoic, which is attributed to the hepatic mass, rather than pancreatitis.
<b>HOSPITAL NAME</b>	A very small portion of the right limb is visualized; no overt abnormalities are observed.
Oxford County VC	
<b>REFERRING VET</b>	<b>Other</b>
Dr. Halfon	<b>Lymph nodes</b> No abnormalities are observed
<b>INVOICE</b>	<b>Abdominal effusion</b> is not visualized.
30058	
<b>DATE</b>	<b>ULTRASONOGRAPHIC FINDINGS</b>
5/2/22	



**PATIENT**  
Maggie May Hainer

- Presence of hepatic mass that is mildly heterogenous. Differential diagnoses include an adenoma (hepatoma), which is a benign tumour. However, a well differentiated hepatocellular carcinoma cannot be excluded.

**SPECIES**  
Canine

- The mild renal changes observed are suggestive of age-related degeneration. The left kidney shows a hyperechoic cortical lesion, which is most consistent with an ischemic infarct and/or insult with fibrosis.

**BREED**  
Shih Tzu

- The right adrenal gland is very mildly enlarged for a dog of Maggie May's stature, while the left is at the high end of the normal reference range. There is no evidence of a mass. These findings are suggestive of adrenal hyperplasia, which may occur secondary to stress (chronic illness), however pituitary dependent hyperadrenocorticism cannot be excluded. The latter would be an incidental finding in which she is not clinical and further diagnostic tests are not indicated.

**SEX**  
Spayed Female

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Thoracic radiographs (three views) are suggested to exclude pulmonary metastases (see later).

**AGE**  
14 years

A fine needle aspirate of the hepatic mass is suggested. It should be noted that cytology cannot always differentiate an adenoma (hepatoma) from a well differentiated hepatocellular carcinoma, i.e., a tissue biopsy may be required.

**WEIGHT**  
10 lbs

If surgery is considered, a CT scan with angiography is suggested prior to the procedure to determine if the mass is resectable. A CT scan of the thorax may be performed at the same time, as it is more sensitive and specific compared to radiographs.

**INTERPRETED BY**

A urinalysis is recommended. If there is no evidence of an infection, a urine protein: creatinine ratio is suggested.

Lisa Carioto, DVM,  
DVSc, Diplomate  
ACVIM

An arterial blood pressure is also recommended to rule out hypertension based on the changes observed with Maggie May's renal changes.

**IMAGING PERFORMED BY**

Kelly Reshny, RVT

**HOSPITAL NAME**

Oxford County VC

**REFERRING VET**

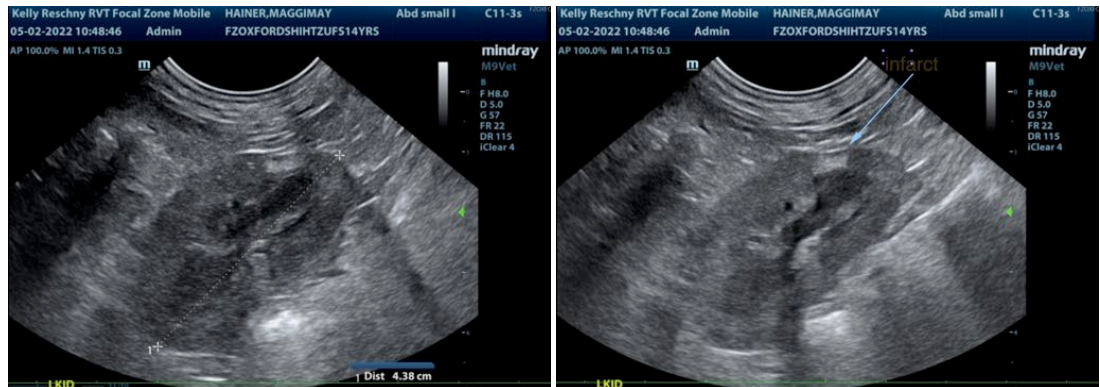
Dr. Halfon

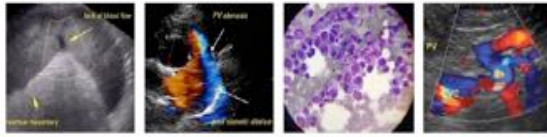
**INVOICE**

30058

**DATE**

5/2/22





**PATIENT**

Maggie May Hainer

**SPECIES**

Canine

**BREED**

Shih Tzu

**SEX**

Spayed Female

**AGE**

14 years

**WEIGHT**

10 lbs

**INTERPRETED BY**

Lisa Carioto, DVM,  
DVSc, Diplomate  
ACVIM

**IMAGING  
PERFORMED BY**

Kelly Reshny, RVT

**HOSPITAL NAME**

Oxford County VC

**REFERRING VET**

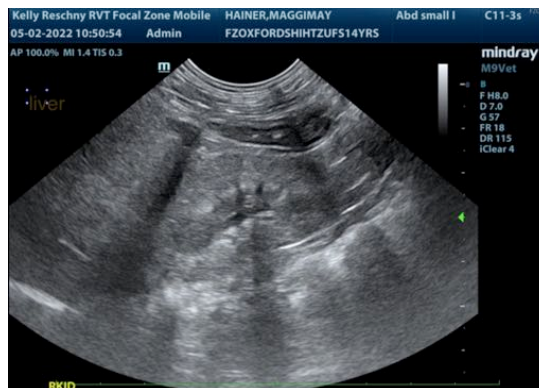
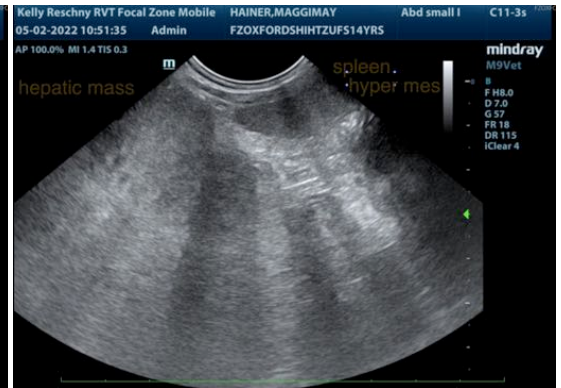
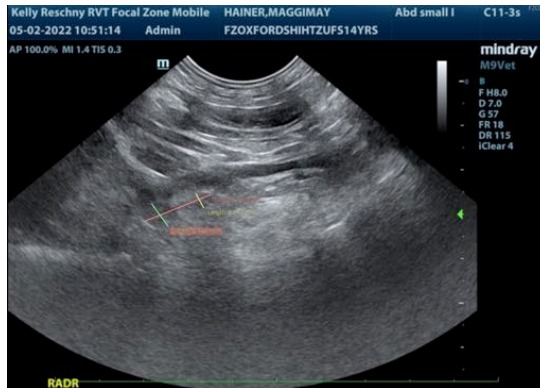
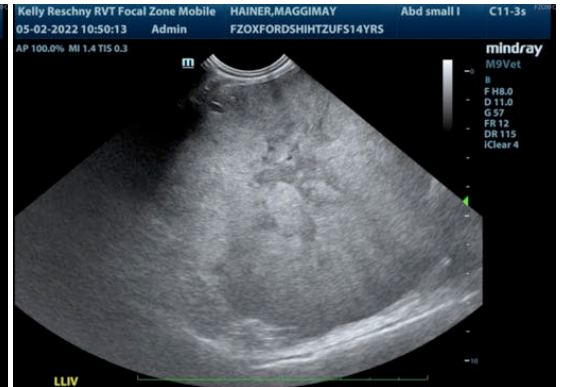
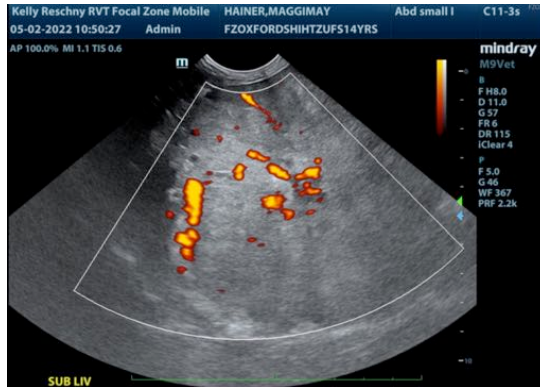
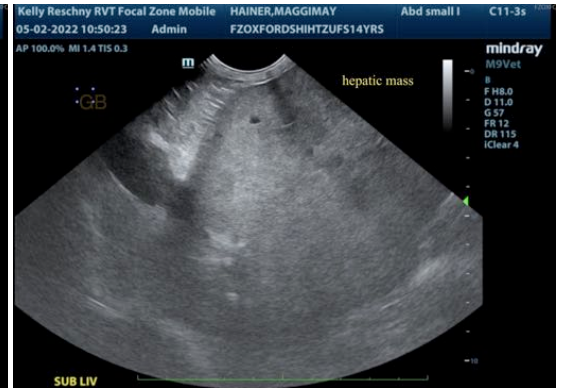
Dr. Halfon

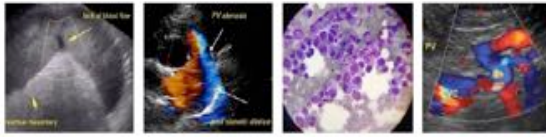
**INVOICE**

30058

**DATE**

5/2/22





**PATIENT**

Maggie May Hainer

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.

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

[Lisa.Carioto@sonopath.com](mailto:Lisa.Carioto@sonopath.com)

**BREED**

Shih Tzu

**SEX**

Spayed Female

**AGE**

14 years

**WEIGHT**

10 lbs

**INTERPRETED BY**

Lisa Carioto, DVM,  
DVSc, Diplomate  
ACVIM

**IMAGING  
PERFORMED BY**

Kelly Reshny, RVT

**HOSPITAL NAME**

Oxford County VC

**REFERRING VET**

Dr. Halfon

**INVOICE**

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**DATE**

5/2/22