

**PATIENT**

Sadie Cox

SPECIES

Canine

BREED

Shih Tzu

SEX

Spayed Female

AGE

9 years

WEIGHT

14 Pounds

INTERPRETED BYLisa Carioto, DVM,
DVSc, Diplomate
ACVIM**IMAGING PERFORMED BY**

Amy Mayhew LVT

HOSPITAL NAME

SVS Imaging Michigan

REFERRING VET

Mitten AH

INVOICE

30214

DATE

5/2/22

PRESENTING CLINICAL SIGNS

Patient originally presented on 04/13/2022 interested in dental prophy and excision of 3mm firm raised hairless dermal mass on craniodistal left antebrachium because patient licks at it. Patient had previous lab work at other DVM - see attached records - that revealed markedly elevated AlkPhos (1120), mildly elevated ALT (307), mild hypercholesterolemia (359), mild hyperalbuminemia (4.7) and mild hyperglycemia (137). A low dose dexamethasone suppression test performed on 04/25/2022 did not support hyperadrenocorticism.

Abnormal PE/Chem/CBC/UA Results: Exam findings and abnormal lab values: See attached lab work

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

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.

Kidneys

The **left** kidney measures 4.68 cm. The capsule is smooth. The cortex is mildly hyperechoic and a very 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. The surrounding mesentery is not hyperechoic.

The **right** kidney measures 5.08 cm. Findings are similar to the left kidney.

Aortic bifurcation/trifurcation

No abnormalities observed.

Adrenal Glands

The **left** adrenal gland measures 0.60 cm at the cranial pole (high normal for a dog of Sadie's stature) and 0.55 cm at the caudal pole. No abnormalities are noted with the gland's overall architecture, echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

The **right** adrenal gland measures 0.61 cm at the cranial pole, and 0.66 cm at the caudal pole (mildly enlarged for a dog of Sadie's stature). No abnormalities are noted with the gland's overall architecture, echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

Spleen

The spleen is within normal limits in size, architecture, echotexture, and echogenicity. The capsule is smooth. Occasional perivascular cuffing is observed, which is associated with myelolipomas. This is not considered clinically significant. No abnormalities are observed with its vasculature, i.e. congestion and thrombi are not identified.

**PATIENT**

Sadie Cox

Liver

Mild hepatomegaly is suspected. The liver's borders are smooth and sharp. It is homogeneous, but is diffusely hyperechoic. Focal lesions are not visualized. No abnormalities are observed with the hepatic vessels visualized.

SPECIES

Canine

BREED

Shih Tzu

The gallbladder (GB) is mildly distended with a moderate amount of free floating, gravity dependent, and inspissated echogenic material. The GB wall is within normal limits in thickness and echogenicity. 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.

SEX

Spayed Female

Gastrointestinal

Ingesta and gas are present within the lumen of the stomach. The gastric wall is within normal limits in thickness and the wall layers are well defined. Subjectively, the muscularis is mildly more prominent than usual. No obvious abnormalities are observed with its peristalsis.

AGE

9 years

The small intestinal wall thickness, including the duodenum (0.42 cm), is within normal limits and the definition of the wall layers is preserved. Fogging and stippling of the mucosa of the duodenum and small intestines are observed. Ingesta is noted in the jejunum. Abnormally dilated loops of bowel are not observed.

WEIGHT

14 Pounds

The colonic wall is not thickened and mural detail is considered normal.

INTERPRETED BYLisa Carioto, DVM,
DVSc, Diplomate
ACVIM**Pancreas**

No overt abnormalities are observed with the echogenicity or echotexture of the left limb. There is no evidence of hyperechogenicity of the surrounding mesentery, i.e., signs of active pancreatitis are not present.

IMAGING PERFORMED BY

Amy Mayhew LVT

The body and right limb of the pancreas is mildly hypoechoic and has a mildly coarse echotexture. These changes are most likely due to nodular hyperplasia and areas of fibrosis, which are considered secondary to age and possibly to previous episodes of pancreatitis, respectively. Signs of active pancreatitis or neoplasia are not appreciated.

HOSPITAL NAME

SVS Imaging Michigan

Other**Lymph nodes**

No abnormalities are observed

REFERRING VET

Mitten AH

Abdominal effusion is not visualized.

INVOICE

30214

ULTRASONOGRAPHIC FINDINGS

- Very mild renal changes are present, which are suggestive of age related degeneration.

DATE

5/2/22

**PATIENT**

Sadie Cox

SPECIES

Canine

BREED

Shih Tzu

SEX

Spayed Female

AGE

9 years

WEIGHT

14 Pounds

- The adrenal glands are “plump” and at the high end of the normal reference range to very mildly increased for a dog of Sadie’s stature. This may occur be due to adrenal hyperplasia secondary to stress or chronic illness. Pituitary dependent hyperadrenocorticism is also possible, but considered less likely given the absence of clinical signs, or clinical signs have not yet developed. Further diagnostics are not necessary if a patient is not demonstrating clinical signs of HAC. However, an evaluation an arterial blood pressure and a urine protein: creatinine ratio (to obtain baseline results) is recommended.
- The body and right limb of the pancreas is mildly hypoechoic and has a mildly coarse echotexture. These changes are most likely due to nodular hyperplasia and areas of fibrosis, which are considered secondary to age and possibly to previous episodes of pancreatitis, respectively. Signs of active pancreatitis or neoplasia are not appreciated.
- The mild hepatomegaly and diffuse hyperechogenicity of the liver, may be due to a vacuolar hepatopathy. A vacuolar hepatopathy may occur due to stress, chronic illness, or HAC. Other differential diagnoses for a diffusely hyperechoic liver, such as hepatitis, cholestasis and cholangitis/cholangiohepatitis, are considered unlikely, but cannot be excluded.
- The presence of sludge in the gallbladder is often clinically insignificant, however, some dogs may show clinical signs of gastroesophageal reflux disease (GERD), therefore, obtaining a history regarding signs of GERD from the client is suggested. Treatment with an anti-acid, proton pump inhibitor or ursodeoxycholic acid may be required depending on the Sadie’s history.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Obtaining a history regarding signs of GERD from the client is suggested. Treatment with an anti-acid, proton pump inhibitor or ursodeoxycholic acid may be required depending on the Sadie’s history.

An arterial blood pressure and a urine protein: creatinine ratio (to obtain baseline results) is recommended.

Further diagnostics, such as a low-dose dexamethasone suppression test or an ACTH stimulation test are not necessary as Sadie is not demonstrating clinical signs.

INTERPRETED BY

Lisa Carioto, DVM,
DVSc, Diplomate
ACVIM

IMAGING PERFORMED BY

Amy Mayhew LVT

HOSPITAL NAME

SVS Imaging Michigan

REFERRING VET

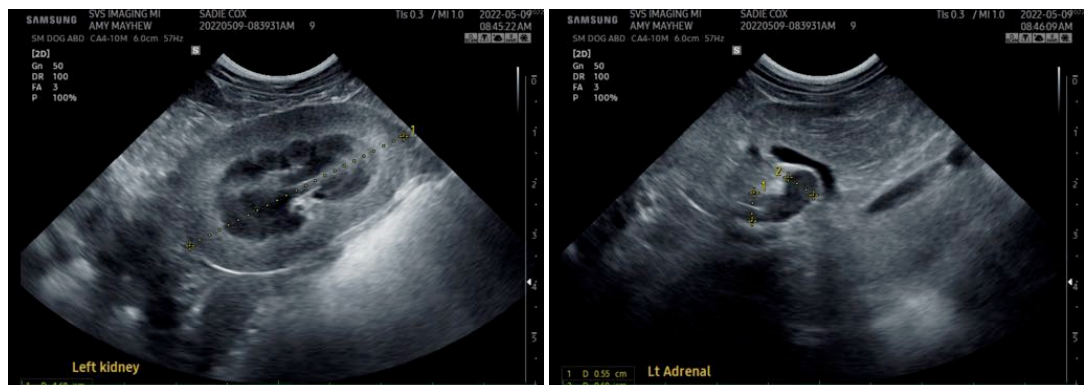
Mitten AH

INVOICE

30214

DATE

5/2/22



IMAGING PERFORMED BY

SVS Mobile Imaging MI 734-637-7711
svsimagingmi@gmail.com



PATIENT

Sadie Cox

SPECIES

Canine

BREED

Shih Tzu

SEX

Spayed Female

AGE

9 years

WEIGHT

14 Pounds

INTERPRETED BY

Lisa Carioto, DVM,
DVSc, Diplomate
ACVIM

**IMAGING
PERFORMED BY**

Amy Mayhew LVT

HOSPITAL NAME

SVS Imaging Michigan

REFERRING VET

Mitten AH

INVOICE

30214

DATE

5/2/22



IMAGING PERFORMED BY

SVS Mobile Imaging MI 734-637-7711
svsimagingmi@gmail.com



PATIENT

Sadie Cox

SPECIES

Canine

BREED

Shih Tzu

SEX

Spayed Female

AGE

9 years

WEIGHT

14 Pounds

INTERPRETED BY

Lisa Carioto, DVM,
DVSc, Diplomate
ACVIM

**IMAGING
PERFORMED BY**

Amy Mayhew LVT

HOSPITAL NAME

SVS Imaging Michigan

REFERRING VET

Mitten AH

INVOICE

30214

DATE

5/2/22



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.

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

Lisa.Carioto@sonopath.com