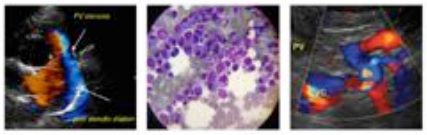
IMAGING PERFORMED BY
SVS Mobile Imaging MI 734-637-7711
svsimagingmi@gmail.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT

Huckleberry Steck

SPECIES

Canine

BREED

Labrador

SEX

Neutered Male

AGE

6 years

WEIGHT

81 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

30121

DATE

5/2/22

PRESENTING CLINICAL SIGNS

Presents for recheck AUS (last performed Feb 2022 and attached for your review). Patient has been on Ursodiol 500mg SID since scan. Also on Mexilitine, Prednisone 15mg SID, SamE 800mg SID, Milk Thistle 250mg SID, Fish Oil 3600mg BID, and Taurine 2000mg BID.

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.

Prostate

The prostate is homogenous and measures 1.04 cm, which is within normal limits for a neutered male.

Kidneys

The **left** kidney measures 8.49 cm. The capsule is smooth and its overall architecture, including the definition of the cortico-medullary junction, are preserved. There are no signs of nephroliths or pyelectasia. The surrounding mesentery is not hyperechoic.

The **right** kidney measures 8.20 cm. Findings are similar to the left kidney.

Aortic bifurcation/trifurcation

No abnormalities observed.

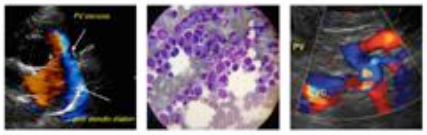
Adrenal Glands

Measurements are stable compared to February 28, 2022.

The **left** adrenal gland measures 0.33 cm at the cranial pole, 0.33 cm at the caudal pole and 1.90 cm in length. It is thinner and flatter than the normal reference range. However, no abnormalities are noted with the gland's overall echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable. The results from the previous ultrasound performed on February 28, 2022, were 0.36 cm and 0.35 cm, respectively.

The **right** adrenal gland measures 0.41 cm at the cranial pole, 0.33 cm at the caudal pole. It is thin and flat, yet no abnormalities are noted with the gland's echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable. The gland measured 0.41 cm at cranial pole and 0.32 cm at the caudal pole on February 28, 2022.

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



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT

Huckleberry Steck

SPECIES

Canine

BREED

Labrador

SEX

Neutered Male

AGE

6 years

WEIGHT

81 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

30121

DATE

5/2/22

Spleen

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.

Liver

There are no obvious signs of hepatomegaly and its borders are smooth and sharp to very mildly rounded. Subjectively, the liver is mildly hyperechoic, however, it remains hypoechoic to the spleen. The liver's echotexture is homogeneous and is considered within normal limits. Focal lesions are not visualized. No abnormalities are observed with the hepatic vessels visualized.

The gallbladder (GB) wall is very mildly thickened (1.25 mm) and very mildly hyperechoic. The GB is mildly to moderately distended with a marked amount of echogenic material (sludge) within the lumen. The debris is comprised of free floating material, as well as inspissated sludge which remains immobile. Furthermore, strings of mucus are noted arising from the luminal wall and attaching to the immobile portions of the sludge. There are no signs of choleliths. Edema is not noted surrounding the GB. The portions of the cystic duct observed is not dilated or tortuous, i.e. there are no signs of an obstruction.

Gastrointestinal

A moderate amount of gas is present in the lumen of the stomach. The gastric wall is within normal limits in thickness and the wall layers are well defined. No obvious abnormalities are observed with its peristalsis.

The small intestinal wall thickness, including the duodenum, is within normal limits and the definition of the wall layers is preserved. A few loops of small intestines show mild stippling of the mucosa. Abnormally dilated loops of bowel are not observed.

The colonic wall is not thickened, but at the high end of the normal reference range (0.19 cm) and mural detail is considered normal.

There are no obvious signs of a mass, foreign body, infiltrative disease or an obstruction in the gastrointestinal tract.

Pancreas

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

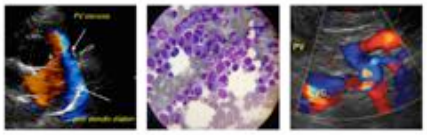
Other

Lymph nodes

No abnormalities are observed

Abdominal effusion is not visualized.

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



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT

Huckleberry Steck

SPECIES

Canine

BREED

Labrador

SEX

Neutered Male

AGE

6 years

WEIGHT

81 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

30121

DATE

5/2/22

ULTRASONOGRAPHIC FINDINGS

- Previously diagnosed with myocarditis as a puppy.
- Both adrenal glands are decreased, but stable in size compared to Huckleberry's previous ultrasound, which was performed on February 28th, 2022. The thinner and flattened adrenal glands are attributed to the chronic administration of prednisone.
- The very mild hyperechogenicity of the liver is attributed to the administration of prednisone, and is not considered clinically significant. The elevated ALP enzyme activity on Huckleberry's blood work is also secondary to the administration of glucocorticoids.
- Gallbladder sludge, some of which is immobile. Therefore, a mucocele, in its early stages of development cannot be excluded. A mild improvement is noted compared to Huckleberry's previous ultrasound. The administration of ursodeoxycholic acid should help continue liquifying the bile, and decreasing toxic bile acids and inflammation.
- The clinical significance of the subtle mucosal stippling of the small intestines is not known, and may not be clinically significant. Mucosal stippling may be suggestive of inflammation. However, further diagnostics are not recommended if Huckleberry is not showing gastrointestinal signs, such as vomiting or diarrhea.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Continue treatment with ursodeoxycholic acid (Ursodiol). The dose may be divided twice a day if Huckleberry is showing signs of nausea or camps associated with its administration. A re-evaluation of the ultrasound may be performed in approximately 4 months to monitor the evolution of the GB.

The SAM-e/silybin supplement may be helping protect Huckleberry's liver, however, the main issue at the moment is induction of the ALP enzyme due to the administration of prednisone, therefore its administration is not likely necessary.

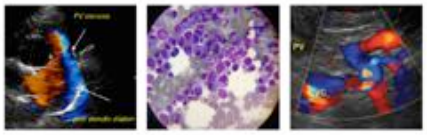
Although Huckleberry experienced myocarditis as a puppy, it is rare that an individual requires a daily dose of prednisone at 0.5 mg/kg PO per day. Attempts should be made to decrease the dose to the minimum effective dose, and it may often be discontinued. A re-evaluation of the echocardiogram may be performed prior to complete discontinuation to ensure cardiac changes have not occurred.

For example, the dose may be decreased as per the following schedule if Huckleberry continues to act normally, maintain a normal heart rate and rhythm, etc.

12.5 mg PO once a day for 2 weeks, then
10 mg PO once a day for 2 weeks, then
7.5 mg PO once a day for 2 weeks, then
5 mg PO once a day for 2 weeks, then
3.75 mg PO once a day for 2 weeks, then
2.5 mg PO once a day for 2 weeks, then
2.5 mg PO every other day for 2 weeks, then
2.5 mg PO every 3 days for 2 weeks, then
2.5 mg PO every 4 days for 2 weeks.
It can be discontinued 2 weeks after having been administered at a dose of 2.5 mg every 7 days.

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

SVS IMAGING



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT

Huckleberry Steck

SPECIES

Canine

BREED

Labrador

SEX

Neutered Male

AGE

6 years

WEIGHT

81 Pounds

INTERPRETED BY

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

IMAGING PERFORMED BY

Amy Mayhew LVT

HOSPITAL NAME

SVS Imaging Michigan

REFERRING VET

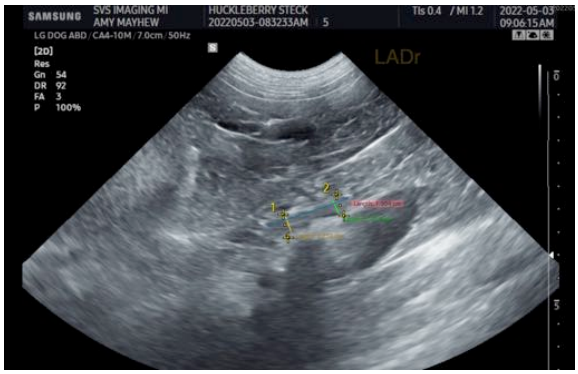
Mitten AH

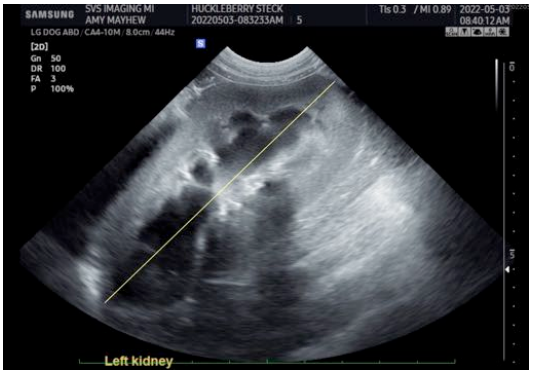
INVOICE

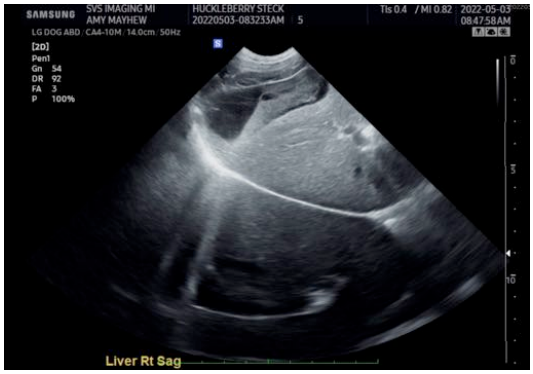
30121

DATE

5/2/22

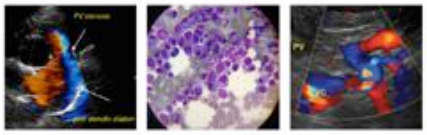






IMAGING PERFORMED BY
SVS Mobile Imaging MI 734 - 637 - 7711
svsimagingmi@gmail.com

SVS IMAGING



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT

Huckleberry Steck

SPECIES

Canine

BREED

Labrador

SEX

Neutered Male

AGE

6 years

WEIGHT

81 Pounds

INTERPRETED BY

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

IMAGING PERFORMED BY

Amy Mayhew LVT

HOSPITAL NAME

SVS Imaging Michigan

REFERRING VET

Mitten AH

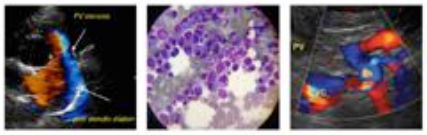
INVOICE

30121

DATE

5/2/22

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



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT

Huckleberry Steck

SPECIES

Canine

BREED

Labrador

SEX

Neutered Male

AGE

6 years

WEIGHT

81 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

30121

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