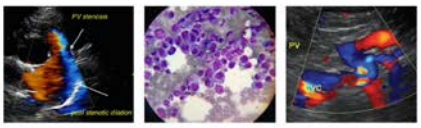
IMAGING PERFORMED BY
svsimaging.net 309-737-3070



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

PATIENT

Beau Jacques Matthes

SPECIES

Canine

BREED

Shih Tzu

SEX

Neutered Male

AGE

10 Years

WEIGHT

16 Pounds

INTERPRETED BY

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

IMAGING PERFORMED BY

Sarah Pender, CVT

HOSPITAL NAME

SVS Imaging QC

REFERRING VET

Dr. Jennifer Duster

INVOICE

36930

DATE

4/15/22

PRESENTING CLINICAL SIGNS

Doing well, Baseline scan of abdomen
Abnormal PE/Chem/CBC/UA Results: Increased ALT and ALKP, otherwise no abnormal values. Is currently on Denamarin

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is well distended with anechoic contents. A trivial amount of sediment is present, in addition to a cystolith, measuring 5.5 mm. There are no signs of an obstruction. The apex is very mildly irregular in certain views. No abnormalities are noted with the trigone or proximal urethra. There is no evidence of polyps or a mass.

The prostate is homogenous and measures 6.1 mm, which is within normal limits for a neutered male.

The **left** kidney measures 4.56 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. Multiple mineralizations of the diverticulae and pelvis are present, in addition to multiple nephroliths. Pyelectasia is absent (there is no evidence of an obstruction). The surrounding mesentery is not hyperechoic.

The **right** kidney measures 4.19 cm. Findings are similar to the left kidney, however, the nephroliths are not as large.

Aortic bifurcation/trifurcation: No abnormalities observed.

Adrenal Glands

Presence of a well-circumscribed nodule or mass effect at the caudal pole of the **left** adrenal gland. The gland measures 0.47 cm at the cranial pole, 1.32 cm at the caudal pole and 2.73 cm in length. The nodule measures 1.32 cm in diameter x 1.50 cm in length It is homogeneous and no abnormalities are observed with its echogenicity. Blood flow of the phrenicoabdominal vein and the surrounding vasculature does not show any signs of thrombi or metastases.

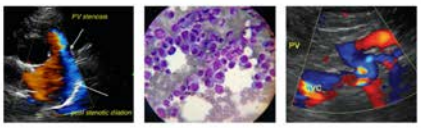
Presence of nodule or mass effect at the cranial pole of the **right** adrenal gland. The gland measures 1.28 cm at the cranial pole, 0.45 cm at the caudal pole and 3.25 cm in length. The nodule itself (cranial pole) measures 1.28 cm in diameter x 1.95 cm in length and it is not as well delineated compared to the left; it appears trilobed in certain views. It is mildly to moderately heterogeneous with two hypoechoic regions. The first region is a hypoechoic nodule, while the second is an ill-defined hypoechoic area. There are no signs of metastases or thrombi in the phrenicoabdominal vein or the surrounding vasculature.

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

Hepatomegaly is possibly present, however, this is better characterized at the time of the ultrasound or with radiographs. The liver's borders are smooth and sharp. The liver's echotexture is homogeneous, however, it is mildly hyperechoic, i.e., it is isoechoic to the spleen. No focal nodules or cystic lesions are observed and the hepatic vessels visualized do not show any abnormalities or congestion.



PATIENT

Beau Jacques Matthes

SPECIES

Canine

BREED

Shih Tzu

SEX

Neutered Male

AGE

10 Years

WEIGHT

16 Pounds

INTERPRETED BY

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

IMAGING PERFORMED BY

Sarah Pender, CVT

HOSPITAL NAME

SVS Imaging QC

REFERRING VET

Dr. Jennifer Duster

INVOICE

36930

DATE

4/15/22

The gallbladder wall is within normal limits in size, thickness and echogenicity. It is distended with a mild to moderate amount of echogenic material (sludge) within the lumen. The sludge is both free floating and gravity-dependent, and some is adhered to the wall. 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.

Gastrointestinal

A large amount of gas is present within the lumen of the stomach (likely due to aerophagia). The gastric wall and pylorus are normal in thickness. There is no loss of definition of the normal architecture of the wall layers. No obvious abnormalities are observed with its peristalsis.

The small intestinal wall thickness, including the duodenum (0.46 cm), is within normal limits. The definition of the wall layers is preserved. Abnormally dilated loops of bowel are not observed. The ileo-cecal-colic junction and the surrounding mesentery are unremarkable.

The transverse colon is filled with gas. The colonic wall is not thickened and mural detail is considered normal.

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

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.

ULTRASONOGRAPHIC FINDINGS

- A cystolith is present within the urinary bladder. There are no obvious signs of an obstruction. The mucosa is very mildly irregular at the apex, which may be created by inflammation due to friction, however, a urinary tract infection cannot be excluded.
- Bilateral mineralization and nephrolithiasis, as well as mild degenerative changes of both kidneys, which are suggestive of age related degeneration. There are no signs of an obstruction. Obvious signs of pyelonephritis are not appreciated.
- The bilateral nodules/mass effects affecting the adrenal glands; caudal pole of the left adrenal and cranial pole of the right adrenal. These nodules may be bilateral benign adenomas (non-functional if Beau Jacques is not demonstrating clinical signs). Adrenal hyperplasia due to chronic illness or pituitary dependent hyperadrenocorticism (HAC) are other differential diagnoses. Sonographic results should be correlated with clinical signs, i.e., further diagnostics are not necessary if a patient is not demonstrating clinical signs of HAC. There are no obvious signs of neoplasia. The hypoechoic lesions observed in the right cranial pole may be due to nodular regeneration.
- The mild hyperechogenicity of the liver is suggestive of a vacuolar hepatopathy, which may occur due to stress (chronic illness), as well as hyperadrenocorticism. Differential diagnoses, such as hepatitis, cholangitis/cholangiohepatitis are considered unlikely, however, cholestasis cannot be excluded. There are no obvious signs of neoplasia.

PATIENT

Beau Jacques Matthes

SPECIES

Canine

BREED

Shih Tzu

SEX

Neutered Male

AGE

10 Years

WEIGHT

16 Pounds

INTERPRETED BY

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

IMAGING PERFORMED BY

Sarah Pender, CVT

HOSPITAL NAME

SVS Imaging QC

REFERRING VET

Dr. Jennifer Duster

INVOICE

36930

DATE

4/15/22

- The presence of sludge in the gallbladder is most likely 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 ursodeoxycholic acid may be required depending on the patient's history.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

A urinalysis and urine culture and sensitivity are recommended to exclude a urinary tract infection due to the presence of the cystolith and the mildly irregular bladder wall.

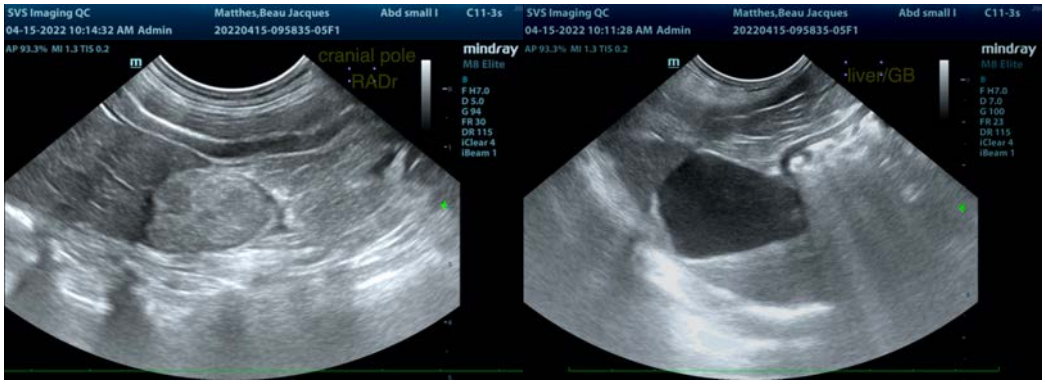
An in-house urinalysis in which the sample is evaluated within 30 minutes of collection may be performed to evaluate for crystalluria; one could try a dissolution diet if struvites are present.

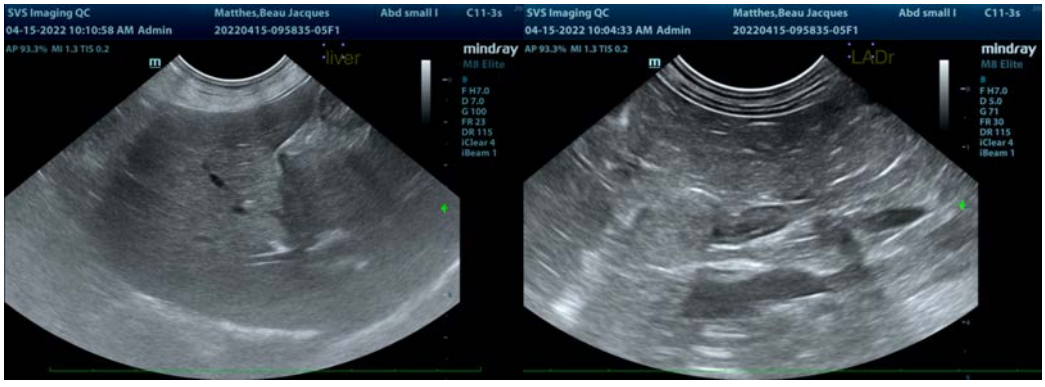
A urine culture and sensitivity is recommended. If negative, a urine protein: creatinine ratio is suggested.

A fundic exam is also recommended, as is an evaluation of the blood pressure, ideally in the presence of the client to minimize the effects of stress.

Evaluation of Beau Jacques' history for signs of GERD is recommended.

Further diagnostic tests for hyperadrenocorticism are suggested if Beau is hypertensive and/or proteinuria (providing the cystolith is not a source of hematuria and inflammation, and a urinary tract infection are not present).

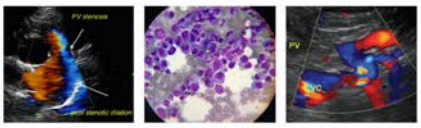




IMAGING PERFORMED BY

svsimaging.net 309-737-3070

SVS IMAGING



SonoPath

Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™

1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT

Beau Jacques Matthes

SPECIES

Canine

BREED

Shih Tzu

SEX

Neutered Male

AGE

10 Years

WEIGHT

16 Pounds

INTERPRETED BY

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

IMAGING PERFORMED BY

Sarah Pender, CVT

HOSPITAL NAME

SVS Imaging QC

REFERRING VET

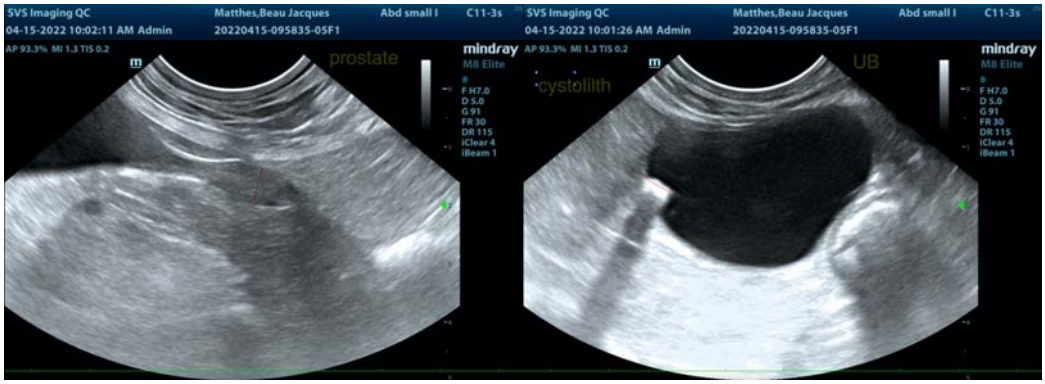
Dr. Jennifer Duster

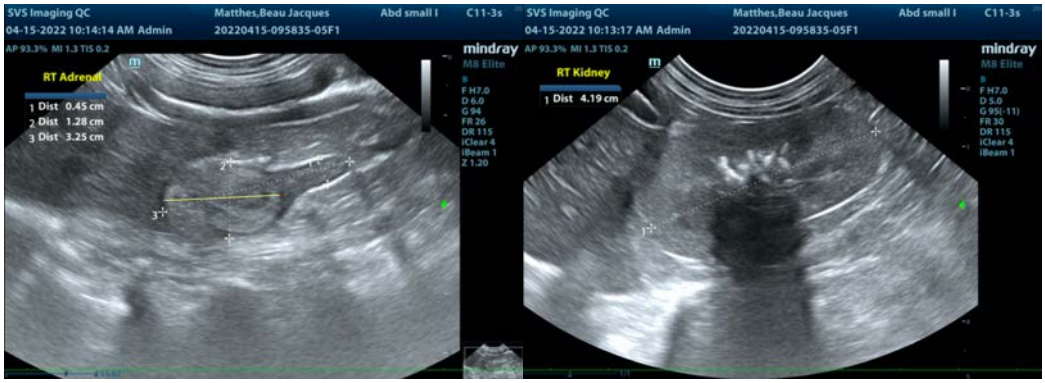
INVOICE

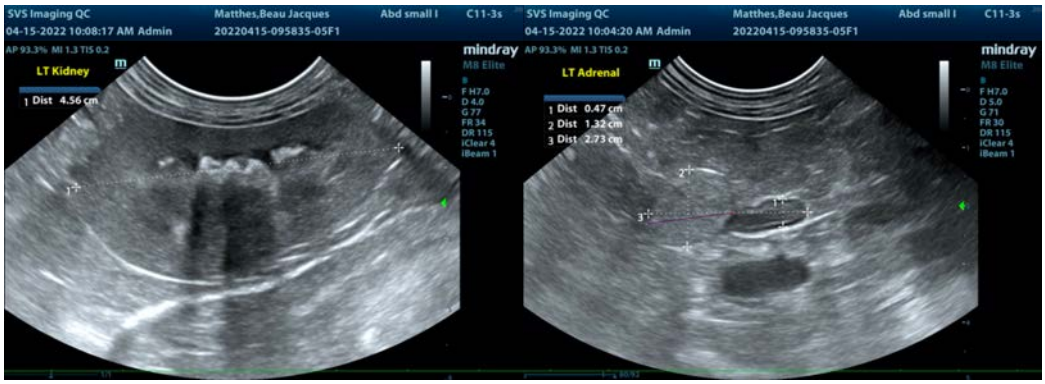
36930

DATE

4/15/22







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