**PATIENT**

Max Ruswick

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

13.5 Years

WEIGHT

20 Pounds

INTERPRETED BYBeth Johnson, DVM
DACVIM**IMAGING PERFORMED BY**

Amy Mayhew, LVT

HOSPITAL NAME

SVS Imaging MI

REFERRING VETUnion Lake Vet
Hospital**INVOICE**

37028

DATE

4/20/22

PRESENTING CLINICAL SIGNS

Presents for chronic vomiting and weight loss. Previously slightly elevated T4.
 Abnormal PE/Chem/CBC/UA Results: Please see attached BW. Fructosamine and PLI pending.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

Urinary bladder is moderately distended. It has a normal uniform wall thickness (<0.2 cm). Contents include primarily anechoic fluid combined with suspended echogenic non-shadowing debris within the fluid. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

The right kidney is normal in size (4.46 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.

The left kidney is normal in size (4.53 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.

Adrenal Glands

The right adrenal gland is normal in size (0.50 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.48 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

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). Multifocal well-demarcated hyperechoic homogenous nodules are present. Splenic vasculature appears normal.

Liver

The 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. Two 1.0-1.5 cm cystic structures are present. The larger 1.5 cm structure is in the left liver, the smaller 1.0 cm structure is in the right liver. Visible vasculature and biliary tree appear normal without distension or congestion.

The 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.

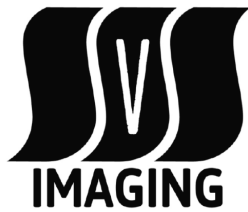
Gastrointestinal

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness. Normal layering is maintained except for a diffusely disproportionately thick muscularis layer relative to mucosa. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of

IMAGING PERFORMED BY

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



PATIENT

Max Ruswick

obstruction, foreign material or infiltrative disease. The area around the ileocecolic junction is hyperechoic with mild lymphadenopathy noted. Mesenteric lymph nodes in the area of the ileocecolic junction are prominent.

SPECIES

Feline

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

Pancreas

BREED

DSH

The left pancreas is normal. In the area of the body and the right pancreas, the tissue is markedly hyperechoic and contains anechoic cystic structures within it that appear to be hyperechoic pancreas with pancreatic cysts. Cystic lymph nodes in the area cannot be ruled out.

Free Abdomen

SEX

Neutered Male

There is no evidence of peritoneal effusion.

PRIMARY FINDINGS

- Thick muscularis – This finding has been reported in cats with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma.
- Hyperechoic fat, mesentery, and mesenteric lymphadenopathy in the area of the ileocecolic junction
- Hyperechoic right pancreas containing cysts or surrounded by cystic lymph nodes – most consistent with chronic pancreatitis or acute on chronic pancreatitis. Infiltrative neoplasia cannot be ruled out, but is considered less likely.
- Cystic liver lesions – most consistent with benign cysts or biliary cystadenomas. Infiltrative neoplasia cannot be ruled out but is considered less likely.

AGE

13.5 Years

WEIGHT

20 Pounds

SECONDARY FINDINGS

- Urinary bladder sediment – Urine changes are most consistent with incidental suspended lipid in a cat, however, cellular debris or crystalluria cannot be ruled out and should be interpreted in combination with urinalysis results.
- Hyperechoic splenic nodules – most consistent with benign myelolipomas. Other differentials such as fibrosis or calcification caused by old hematomas or infarcts, chronic inflammation, granulomatous disease or metastatic disease cannot be ruled out, but are less likely.

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Amy Mayhew, LVT

HOSPITAL NAME

SVS Imaging MI

REFERRING VET

Union Lake Vet
Hospital

INVOICE

37028

DATE

4/20/22

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given these ultrasound changes, the top differentials for this patient's gastrointestinal signs and weight loss include infiltrative small bowel disease/pancreatitis/Triaditis. Recommendations include a gastrointestinal malabsorption panel including TLI, PLI, folate and cobalamin to Texas A&M GI laboratory for further assessment of the gastrointestinal tract.

Given this patient's historically mildly increased T4, a free T4 is also recommended if not already evaluated. Ultimately, biopsies of the bowel, being sure to include the ileum is possible, as well as potentially the pancreas and cystic lesions in the cranial abdomen may be necessary to definitively diagnose and therefore manage this patient's underlying disease. However, management of acute pancreatitis with antiemetics, gastroprotectants, appetite stimulants (if necessary), fluid therapy, and pain management, with monitoring of the cranial abdomen for improvement in the hyperechoic/cystic pancreas could be considered prior to more aggressive intervention such as biopsies.

IMAGING PERFORMED BY

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



PATIENT

Max Ruswick

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

13.5 Years

WEIGHT

20 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Amy Mayhew, LVT

HOSPITAL NAME

SVS Imaging MI

REFERRING VET

Union Lake Vet
Hospital

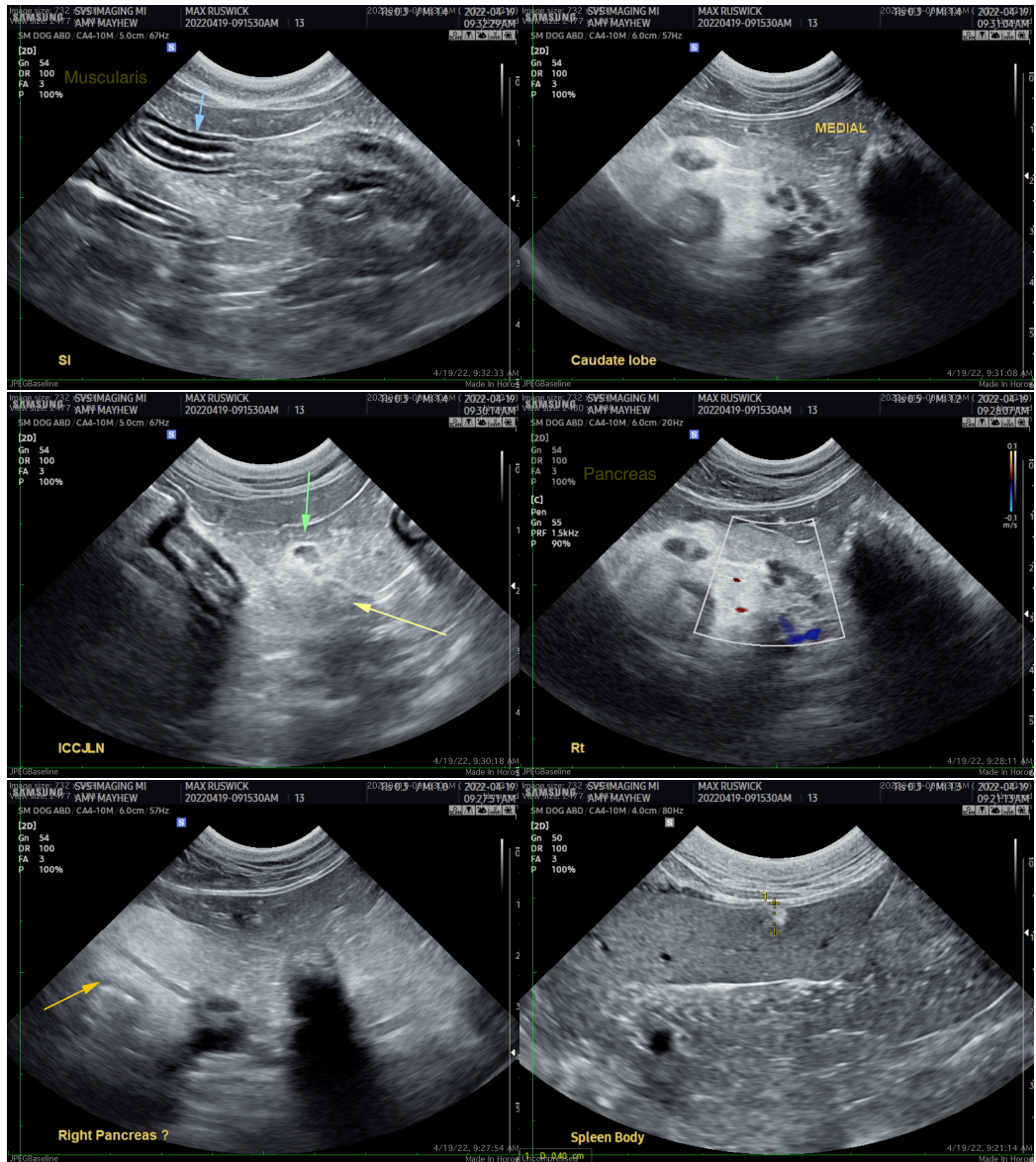
INVOICE

37028

DATE

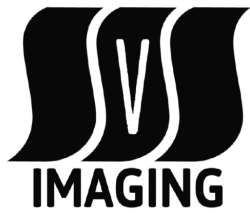
4/20/22

If the pancreatic changes do not change/improve with medical management of pancreatitis, a fine needle aspirate of the area could also be considered prior to pursuing more invasive biopsies. Ultimately, if further diagnostics are not an option, other empirical therapies could include steroids, empirical steroids, and cobalamin supplementation if management of pancreatitis doesn't result in improvement of clinical signs.



IMAGING PERFORMED BY

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



PATIENT

Max Ruswick

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

13.5 Years

WEIGHT

20 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Amy Mayhew, LVT

HOSPITAL NAME

SVS Imaging MI

REFERRING VET

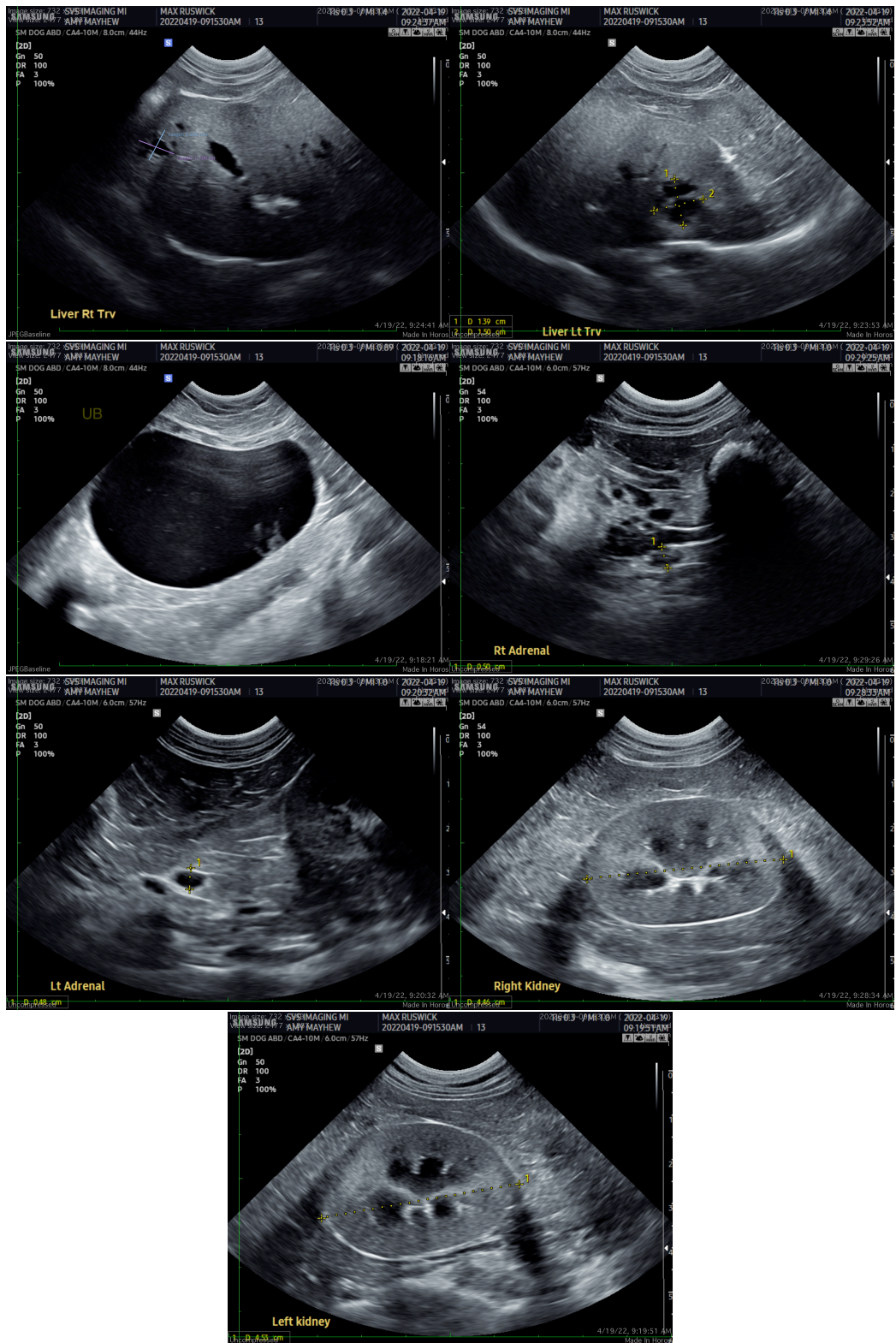
Union Lake Vet
Hospital

INVOICE

37028

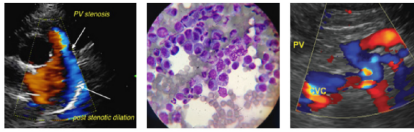
DATE

4/20/22



IMAGING PERFORMED BY

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



Clinical Sonography & Telectology

EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT

Max Ruswick

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

Feline

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
Beth.Johnson@sonopath.com

BREED

DSH

SEX

Neutered Male

AGE

13.5 Years

WEIGHT

20 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Amy Mayhew, LVT

HOSPITAL NAME

SVS Imaging MI

REFERRING VET

Union Lake Vet
Hospital

INVOICE

37028

DATE

4/20/22