**PATIENT**

Garrus Fabris

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Neutered Male

AGE

10 years

WEIGHT

14.3 Pounds

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

Amy Mayhew LVT

HOSPITAL NAME

SVS Imaging Michigan

REFERRING VET

Union Lake VH

INVOICE

31415

DATE

7/1/22

PRESENTING CLINICAL SIGNS

Vomiting and diarrhea.

Abnormal PE/Chem/CBC/UA Results: Normal PLI, high folate, gastric mass and abnormal mesenteric lymph node. Will be off of pred for 1 month prior to us as recommended. **Please see attached previous aus report for comparison. Patient was treated with prednisolone until 1 month ago.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder is well distended. The wall is smooth and regular. No abnormalities are present with the trigone or proximal urethra. A trivial amount of free floating sediment is present, however, there is no evidence of cystoliths, polyps or a mass.

Kidneys

The **left** kidney measures 4.14 cm (3.80-4.40 cm). A very small indentation is noted on the anti-mesenteric border, however, the capsule is otherwise smooth. Its overall architecture, including the definition of the cortico-medullary junction, is preserved. A 1 mm x 1 mm anechoic structure, consistent with a benign cyst, is noted at the anti-mesenteric border, vis à vis the indentation in the capsule. There are no signs of nephroliths or pyelectasia. The surrounding mesentery is not hyperechoic.

The **right** kidney is within normal limits. The capsule is smooth. Its overall architecture, including the definition of the cortico-medullary junction, is preserved. There are no signs of nephroliths or pyelectasia. The surrounding mesentery is not hyperechoic.

Aortic bifurcation/trifurcation

No abnormalities observed.

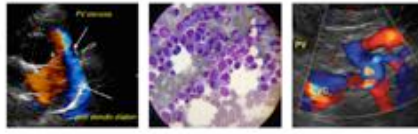
Adrenal Glands

The **left** adrenal gland measures 0.40 cm. 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 0.41 cm. 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 6.9 mm (normal = 10 mm), echotexture, and echogenicity. The capsule is smooth. No abnormalities are observed with its vasculature, i.e. congestion and thrombi are not identified.

**PATIENT****Liver**

Garrus Fabris

Very subtle hepatomegaly may be present. Liver size is better characterized at the time of the ultrasound or radiographically. The liver's borders are smooth, but mildly rounded. The liver's echotexture is homogeneous, but mildly hyperechoic, i.e., it is isoechoic to the falciform fat. Focal lesions are not observed and no abnormalities are observed with the hepatic vessels.

SPECIES

Feline

The **gallbladder** (GB) wall is within normal limits in thickness and echogenicity. A very small amount of echogenic material is present within the GB. The cystic duct is followed to the common bile duct; there is no evidence of dilation or tortuosity, i.e. there are no signs of an obstruction.

BREED

Domestic Shorthair

Gastrointestinal**SEX**

Neutered Male

A moderate amount of fluid and gas are present within the lumen of the pylorus and body of the stomach. The gastric wall is within normal limits in thickness (0.23 cm) and the wall layers are well defined. However, the submucosa is mildly prominent and subtle fogging of the mucosa is noted. Peristalsis is ineffective, i.e., a "to and fro" motion, is observed.

AGE

10 years

The mass present at the time of Garrus' original ultrasound on May 17th, 2022 is not visualized today. Possible fibrosis, approximately 5 mm, is noted along the pylorus, where the original lesion may have been located. Definition of the wall layers is maintained. Very subtle fogging of the mucosa and muscularis is noted.

WEIGHT

14.3 Pounds

Fluid is present in the lumen of the duodenum at the junction of the pyloric-duodenal junction. It measures 0.22 cm (within normal limits (WNL)). The definition of the wall layers is preserved.

INTERPRETED BYLisa Carioto, DVM,
DVSc, Diplomate
ACVIM

The small intestinal wall thickness and definition of the wall layers are within normal limits, yet fogging of the mucosa is present. Multiple loops of jejunum are mildly dilated with fluid and gas and decreased peristalsis is observed. No abnormalities are observed with the ileo-cecal-colic junction.

The colonic wall is not thickened and mural detail is considered normal. Formed stools are present in the colon.

IMAGING PERFORMED BY

Amy Mayhew LVT

Pancreas

The pancreas is very mildly hypoechoic to the surrounding omentum, however, its contours are smooth and regular. Pinpoint hyperechoic foci are scattered throughout the parenchyma, suggestive of age-related fibrosis, and/or fibrosis due to previous episodes of pancreatitis, mineralization, as well as amyloid deposition. The surrounding mesentery is not hyperechoic, i.e. signs of active pancreatitis are not present. Overt signs of neoplasia are not noted.

HOSPITAL NAME

SVS Imaging Michigan

REFERRING VET

Union Lake VH

Other**Lymph nodes**

The gastric LN, which was enlarged at the time of the original ultrasound, is visualized, measuring 2.2 mm in diameter x 5.4 mm. No abnormalities are observed with the echogenicity echotexture or architecture of the lymph node.

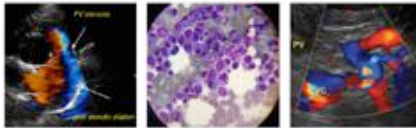
INVOICE

31415

Abdominal effusion**DATE**

7/1/22

A scant amount of anechoic ascites is visualized dorsal to the liver and between two liver lobes.

**PATIENT**

Garrus Fabris

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Neutered Male

AGE

10 years

WEIGHT

14.3 Pounds

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

Amy Mayhew LVT

HOSPITAL NAME

SVS Imaging Michigan

REFERRING VET

Union Lake VH

INVOICE

31415

DATE

7/1/22

ULTRASONOGRAPHIC FINDINGS

- **Gastrointestinal (GI) tract:** There is no evidence of recurrence of the mass since discontinuation of the prednisolone. The mass may still be in remission, despite discontinuation of the prednisolone. Therefore, a re-evaluation of the ultrasound is suggested in 4 to 6 weeks, in addition to monitoring Garrus for signs of gastroesophageal reflux disease (GERD), vomiting, pica, etc.

Fogging of the mucosa and muscularis are present throughout the GI tract, and the submucosa of the stomach is more prominent; these changes may be due to underlying inflammation, for example, *inflammatory bowel disease* (IBD). Another possible cause for the sonographic changes noted in May includes early, focal lymphoma, with secondary gastric erosions and hemorrhage. Remission due to the administration of prednisolone and healing of secondary erosions with sucralfate, omeprazole and famotidine, respectively may have ensued. Signs of subtle inflammation of the GI tract persist.

- **Liver:** The hepatic changes are subtle and most likely due to the previous administration of prednisolone. They should dissipate over the next few weeks.
- **Gallbladder:** The gallbladder **sludge** is most likely clinically insignificant, however, GERD may occur in some patients. Obtaining a history regarding signs of GERD from the client is suggested. Treatment with an anti-acid or proton pump inhibitor may be indicated.
- **Pancreas:** Signs of active pancreatitis and neoplasia are not appreciated. The pancreatic changes are very subtle and most consistent with age-related fibrosis, and/or fibrosis due to previous episodes of pancreatitis, mineralization, as well as amyloid deposition.
- **Ascites:** Increased permeability secondary to inflammation may be the cause.
- **Kidneys:** A very small, benign cyst is identified in the **left** kidney.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Obtaining a history regarding signs of GERD from the client is suggested. Treatment with an anti-acid or proton pump inhibitor, may be required depending on the history (famotidine or omeprazole (0.7-1 mg/kg PO q12h)).

Deworm (if he goes outdoors or lives with pets that go outdoors)

+/- diet change (hypoallergenic diet) depending on current clinical signs. Diet change not recommended if doing well clinically. Monitor weight, body condition and muscle condition scores.

Small, frequent meals

If signs of abdominal discomfort, cramps, etc., analgesia (buprenorphine (0.005-0.01 mg/kg, sublingually, every 8-12 hours) with or without gabapentin. Continue for 3-4 weeks, or longer, as needed.

Treatment of nausea, if indicated

Re-ultrasound stomach and duodenum in 4 to 6 weeks (see above).

Monitor stools for melena.

IMAGING PERFORMED BY

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



PATIENT

Garrus Fabris

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Neutered Male

AGE

10 years

WEIGHT

14.3 Pounds

INTERPRETED BY

Lisa Carioto, DVM,
DVSc, Diplomate
ACVIM

IMAGING PERFORMED BY

Amy Mayhew LVT

HOSPITAL NAME

SVS Imaging Michigan

REFERRING VET

Union Lake VH

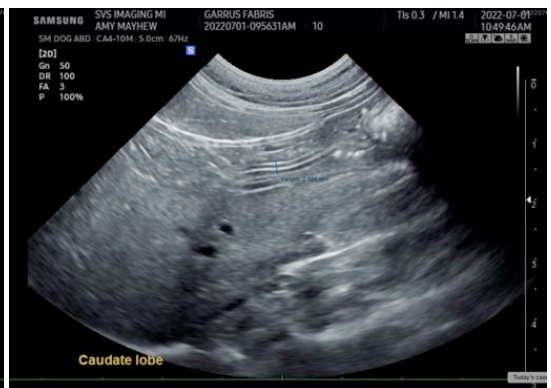
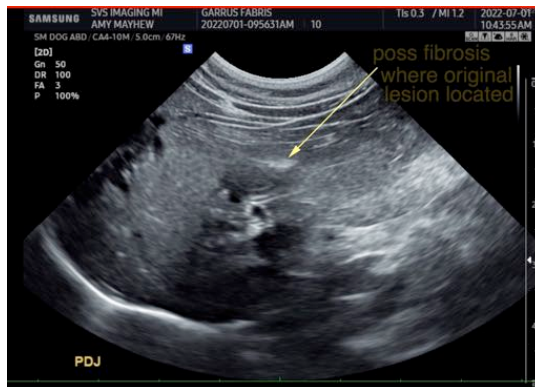
INVOICE

31415

DATE

7/1/22

Although endoscopy and biopsies may be performed, an exploratory laparotomy, with intraoperative ultrasound, may be indicated depending on the ultrasound results in a few weeks. If focal abnormalities are identified, surgical resection of the lesion may be performed with guidance of ultrasound. This would be both diagnostic and therapeutic. Biopsies of other areas of the stomach, duodenum, jejunum and ileum would also be performed at the same time. Note, if endoscopy and biopsies are eventually performed, both the small and large intestines should be evaluated, even if no history of diarrhea.



IMAGING PERFORMED BY

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



PATIENT

Garrus Fabris

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Neutered Male

AGE

10 years

WEIGHT

14.3 Pounds

INTERPRETED BY

Lisa Carioto, DVM,
DVSc, Diplomate
ACVIM

**IMAGING
PERFORMED BY**

Amy Mayhew LVT

HOSPITAL NAME

SVS Imaging Michigan

REFERRING VET

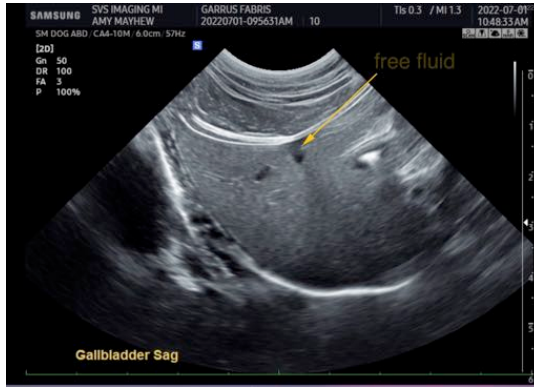
Union Lake VH

INVOICE

31415

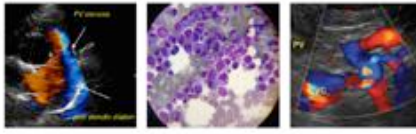
DATE

7/1/22



IMAGING PERFORMED BY

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



PATIENT

Garrus Fabris

SPECIES

Feline

BREED

Domestic Shorthair

SEX

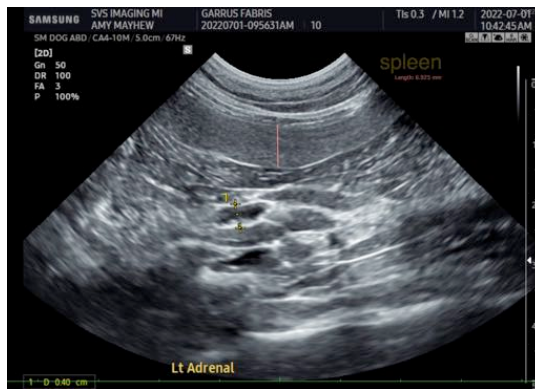
Neutered Male

AGE

10 years

WEIGHT

14.3 Pounds



INTERPRETED BY

Lisa Carioto, DVM,
DVSc, Diplomate
ACVIM

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.

IMAGING PERFORMED BY

Amy Mayhew LVT

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

Lisa.Carioto@sonopath.com

HOSPITAL NAME

SVS Imaging Michigan

REFERRING VET

Union Lake VH

INVOICE

31415

DATE

7/1/22