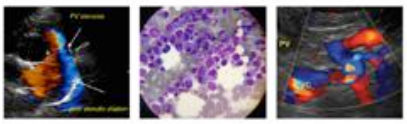


PATIENT

Piper Decleene

SPECIES

Canine

BREED

Golden Retriever

SEX

Spayed Female

AGE

4 years

WEIGHT

33.1 kg

INTERPRETED BY

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

IMAGING PERFORMED BY

Tom McNeill

HOSPITAL NAME

SVS Imaging CT

REFERRING VET

Dr. McNeill

INVOICE

31416

DATE

7/1/22

PRESENTING CLINICAL SIGNS

Received cephalexin 3 weeks ago for skin infection. Presented yesterday to pDVM for bruising and petechiation. Healthy up until this. Was started on Pred 30 mg BID and doxy 200 mg BID yesterday Abnormal PE/Chem/CBC/UA Results: 6/29: plt 1, HCT 40 6/30 pdvm: 4dx neg. plts: 0 HCT 19% 6/30: PCV/TS:19/6.2 CBC:WBC: 38 (4.4-14.6), RBC: 2.5 (5.2-8.1), HGB: 6 (13-20), HCT: 19 (39-58), MCV: 77 (61-75), MCHC: 32 (33-37), Neut: 31920 (2394-7514), Bands: 1140 (0-300), Mono: 4180 (88-1024), nRBC: 11 (0-2), PLT< 1.5-2,000 Retic: 311395 (0-100000) Received 400 ml whole blood transfusion 7/1/22: 12 am: PCV/TP - 23% (L), 6.4 (N), clear Patient still actively having gingival bleeding and newly found petechiation.

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 very small amount of free floating sediment is present, however, there is no evidence of cystoliths, polyps or a mass.

Kidneys

The **left** kidney measures 7.01 cm. 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.

The **right** kidney measures 7.86 cm. 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.

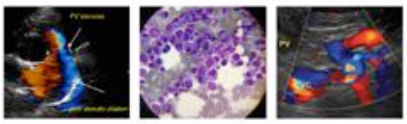
Adrenal Glands

The **left** adrenal gland measures 0.40 cm at the cranial pole, 0.34 cm at the caudal pole. Although no abnormalities are noted with the gland's echogenicity or echotexture, it appears thin for a dog of Piper's stature. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

The **right** adrenal gland measures 0.32 cm at the cranial pole, 0.35 cm at the caudal pole. The gland appears thin for a dog of Piper's stature, however, no abnormalities are noted with its echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

Spleen

Mild splenomegaly is suspected. The spleen is within normal limits in architecture, echotexture, and echogenicity, however, it appears "swollen". The capsule is smooth. No abnormalities are observed with its vasculature, i.e. congestion and thrombi are not identified. The omentum surrounding the spleen is mildly hyperechoic.



PATIENT

Piper Decleene

SPECIES

Canine

BREED

Golden Retriever

SEX

Spayed Female

AGE

4 years

WEIGHT

33.1 kg

INTERPRETED BY

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

IMAGING PERFORMED BY

Tom McNeill

HOSPITAL NAME

SVS Imaging CT

REFERRING VET

Dr. McNeill

INVOICE

31416

DATE

7/1/22

Liver

There are no obvious signs of hepatomegaly and its borders are smooth and sharp. The liver's echotexture is homogeneous and it is within normal limits in echogenicity. Focal lesions are not observed and no abnormalities are observed with the hepatic vessels.

The **gallbladder** (GB) wall is within normal limits in thickness and echogenicity. A trivial amount of echogenic material is present within the GB. 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 rugal fold is focally thickened and hypoechoic. The abnormal area measures approximately 1.31 cm in diameter x 5.88 cm in length. There is no evidence of fluid surrounding the abnormal region to suggest active hemorrhage. However, an anechoic structure, measuring approximately 1.68 cm in diameter x 1.87 cm (depending on the angle) is noted dorsal to the liver, in the area of the abnormal region of the stomach. This structure may be a blood clot. The area surrounding the abnormal rugal fold is moderately to markedly hyperechoic. The remaining gastric wall is within normal limits in thickness, however, the wall layers are not always well defined. The mesentery surrounding the stomach is moderately to markedly hyperechoic. Peristalsis appears decreased, i.e., a "to and fro" motion is observed.

The duodenum measures 0.34 cm. It is within normal limits and the definition of the wall layers is preserved.

The jejunum (small intestinal wall thickness) is within normal limits (0.29 cm, 0.24 cm). No abnormalities are observed with wall definition. No abnormalities are observed with the ileocecal colic junction.

Gas is present in the transverse colon.

The colonic wall is not thickened and mural detail is considered normal. Gas and formed stools are present within the colon.

Pancreas

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

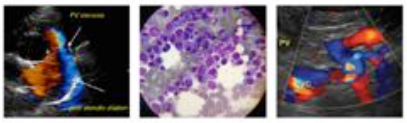
Other

Lymph nodes

Medial iliac LNs: Very mildly hyperechoic and enlarged, with smooth borders

- Right - 1.14 cm in diameter x 2.25 cm in length
- Left - 0.88 cm in diameter x 2.31 cm in length

Gastric LN is somewhat prominent and mildly hypoechoic. It measures 0.76 cm in diameter x 1.11 cm in length. The mesentery in the region surrounding the stomach is hyperechoic.



PATIENT

Piper Decleene

SPECIES

Canine

BREED

Golden Retriever

SEX

Spayed Female

AGE

4 years

WEIGHT

33.1 kg

INTERPRETED BY

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

IMAGING PERFORMED BY

Tom McNeill

HOSPITAL NAME

SVS Imaging CT

REFERRING VET

Dr. McNeill

INVOICE

31416

DATE

7/1/22

Gastric LN. A possible second gastric LN located dorsally to the stomach (still image). It is severely hypo to anechoic, 1.68 cm in diameter x 1.87 cm in length.

Mesenteric LN is enlarged (width and length). It is also mildly hypoechoic. No abnormalities are observed with the surrounding mesentery. 1.10 cm in diameter x 4.53 cm in length

Abdominal effusion is not visualized.

Mesentery

The mesentery in the region of the stomach is moderately hyperechoic.

Subjectively, the mesentery in the caudal abdomen is mildly to moderately hyperechoic.

ULTRASONOGRAPHIC FINDINGS

- **Gastrointestinal tract**: The focally thickened area, with loss of wall layering of the stomach, as well as the other regions of the stomach showing mild loss of definition of mural detail may be due to endothelial damage, inflammation, erosion or ulceration as a result of thrombocytopenia. A possible blood clot is present between the stomach and liver, however, ongoing hemorrhage is not evident and there are no signs of perforation. Neoplasia, such as lymphoma or adenocarcinoma, is considered less likely.

- **Spleen**: Splenomegaly with preservation of architecture, echotexture and echogenicity is most likely due to *extramedullary hematopoiesis*. *Reactive hyperplasia* and *splenitis* are likely playing roles in the changes observed given the history of what is most likely immune-mediated thrombocytopenia (IMT), secondary to the administration of a cephalosporin.

- **Lymphadenomegaly**: *Reactive hyperplasia* is suspected. Neoplasia is considered less likely.

- **Mesentery**: Hyperechogenicity of the mesentery surrounding the stomach is suggestive of steatitis, due to an active inflammatory response. The hyperechogenicity of the caudal mesentery and mildly enlarged iliac LNs may be due to endothelial damage of the GI tract/colon, which is not uncommon in dogs with IMT.

- **Adrenal glands**: Both adrenal glands appear normal with regard to their echogenicity and echotexture, however, they are thinner than what is usually expected. Although this may be normal for Piper, a baseline (random) cortisol is suggested to exclude hypoadrenocorticism

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

If possible, a baseline cortisol is suggested on a blood sample that was obtained prior to the administration of steroids.

A single dose of vincristine is strongly recommended to help decrease further "oozing" and development of petechiae.

If vincristine is not possible, a second immunosuppressive drug, such as chlorambucil, mycophenylate or cyclosporine should be considered. The second drug should be added as soon as possible to take effect as quickly as possible.

If not nauseated, sucralfate 1 gram every 2 to 4 hours for 3 to 4 doses to help treat a possible gastric

PATIENT

Piper Decleene

SPECIES

Canine

BREED

Golden Retriever

SEX

Spayed Female

AGE

4 years

WEIGHT

33.1 kg

INTERPRETED BY

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

IMAGING PERFORMED BY

Tom McNeill

HOSPITAL NAME

SVS Imaging CT

REFERRING VET

Dr. McNeill

INVOICE

31416

DATE

7/1/22

ulcer, then every 8 hours thereafter.

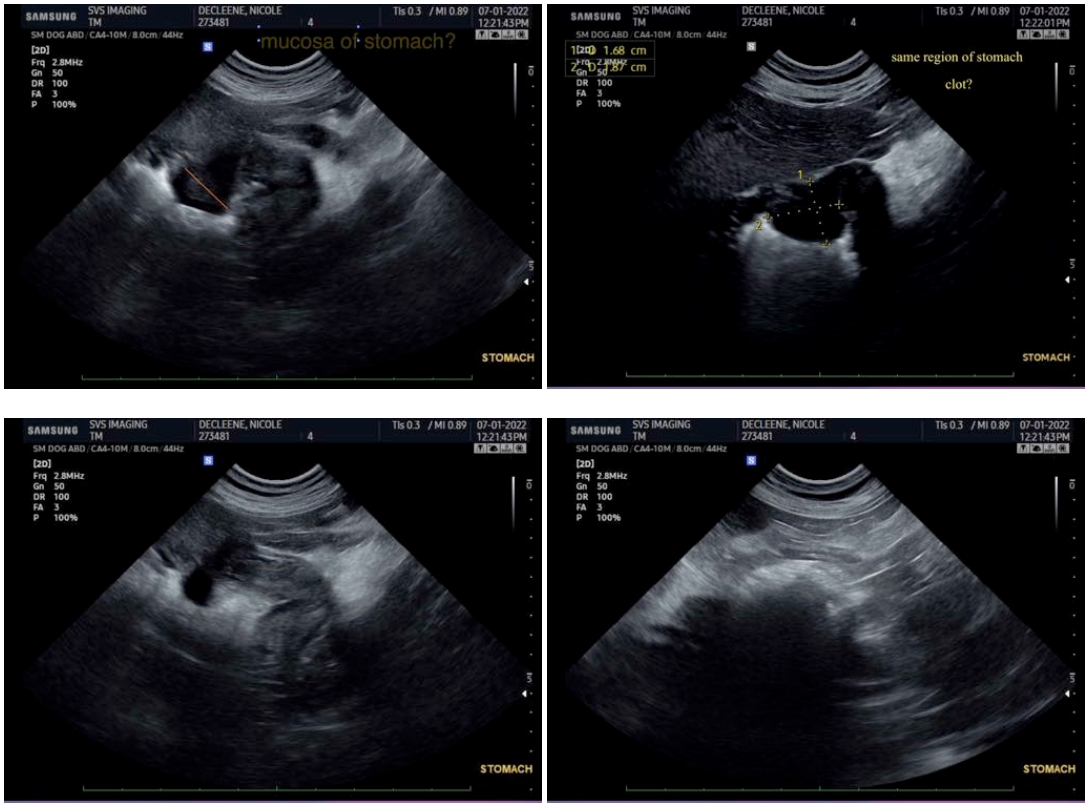
Pantoprazole, 0.7 – 1 mg/kg IV every 12 hours, followed by omeprazole PO every 12 hours once discharged from hospital for 3 to 4 weeks.

Dexamethasone administered IV, instead of oral prednisone, is suggested while hospitalized to avoid direct contact with the GI system.

Supportive care, as needed, i.e. anti-emetics, analgesia (opioids, gabapentin), etc.

Cephalosporins, +/- drugs in the penicillin family, should be avoided in the future. The clients should be informed of the possible cause of IMT and ensure Piper is not treated with cephalosporins, +/- drugs in the penicillin family, in the future (e.g. moves out of state).

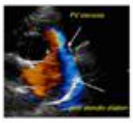
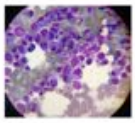
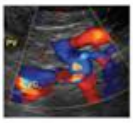
A sonographic re-evaluation of the stomach is recommended in 14 days to monitor its appearance and ensure it is resolving (erosion/ulceration). Further diagnostics (biopsies) are recommended if there is no improvement.



IMAGING PERFORMED BY

svsmobileimaging.com 309 - 737 - 3070

SVS IMAGING

SonoPath

Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT

Piper Decleene

SPECIES

Canine

BREED

Golden Retriever

SEX

Spayed Female

AGE

4 years

WEIGHT

33.1 kg

INTERPRETED BY

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

IMAGING PERFORMED BY

Tom McNeill

HOSPITAL NAME

SVS Imaging CT

REFERRING VET

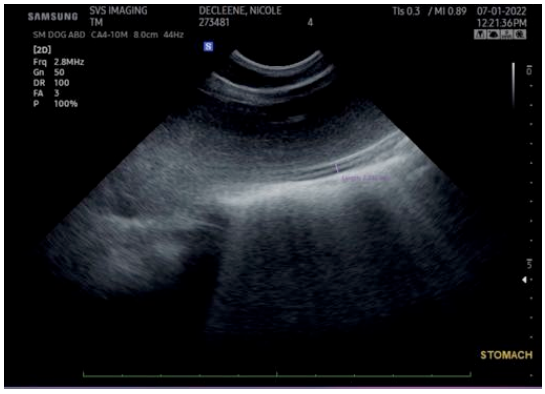
Dr. McNeill

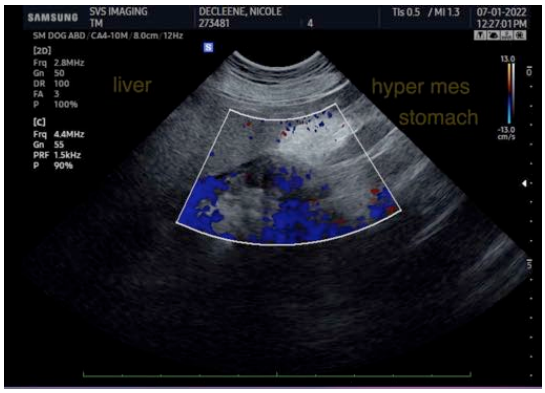
INVOICE

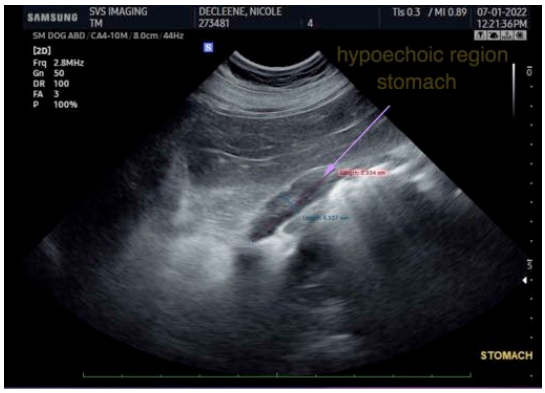
31416

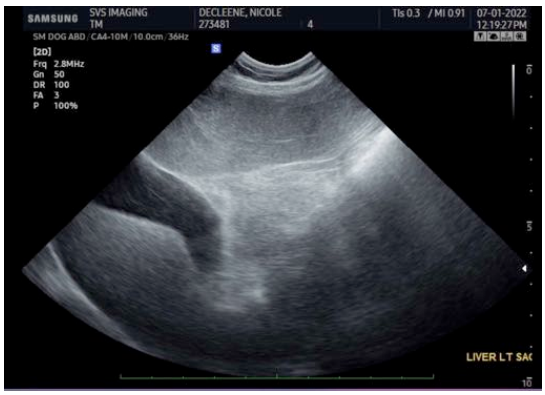
DATE

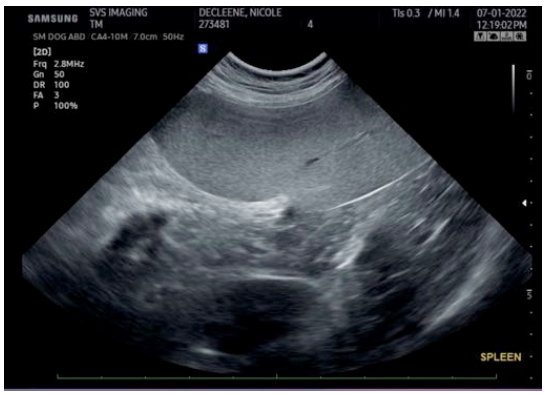
7/1/22





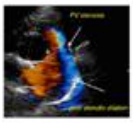
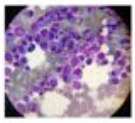
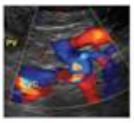






IMAGING PERFORMED BY
svsmobileimaging.com 309 - 737 - 3070

SVS IMAGING

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

PATIENT

Piper Decleene

SPECIES

Canine

BREED

Golden Retriever

SEX

Spayed Female

AGE

4 years

WEIGHT

33.1 kg

INTERPRETED BY

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

IMAGING PERFORMED BY

Tom McNeill

HOSPITAL NAME

SVS Imaging CT

REFERRING VET

Dr. McNeill

INVOICE

31416

DATE

7/1/22

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