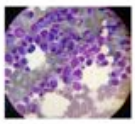




PATIENT

Missy Allen

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Spayed Female

AGE

6 years

WEIGHT

4 lbs

INTERPRETED BY

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

IMAGING PERFORMED BY

Sarah Pender, CVT

HOSPITAL NAME

SVS Imaging QC

REFERRING VET

Dr. Narske

INVOICE

31015

DATE

6/14/22

PRESENTING CLINICAL SIGNS

History: Presented on 6/10/22 for vomiting up blood, not eating, gags after eating
Abnormal PE/Chem/CBC/UA Results: Normal FPL

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 2.70 cm (3.80-4.40 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. Accumulation of intrapelvic fat is noted. The surrounding mesentery is not hyperechoic.

The **right** kidney measures 3.99 cm (3.80-4.40 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. Accumulation of intrapelvic fat is noted. The surrounding mesentery is not hyperechoic.

Aortic bifurcation/trifurcation

No abnormalities observed.

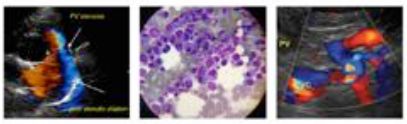
Adrenal Glands

The **left** adrenal gland measures 0.28 cm at the cranial pole, 0.34 cm at the caudal pole and 0.91 cm in length. 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 0.29 cm at the cranial pole, 0.36 cm at the caudal pole and 1.37 cm in length. 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 echotexture, and echogenicity. The capsule is smooth. No abnormalities are observed with its vasculature, i.e. congestion and thrombi are not identified. Size = 5.1 mm (normal = 10 mm).



PATIENT

Missy Allen

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Spayed Female

AGE

6 years

WEIGHT

4 lbs

INTERPRETED BY

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

IMAGING PERFORMED BY

Sarah Pender, CVT

HOSPITAL NAME

SVS Imaging QC

REFERRING VET

Dr. Narske

INVOICE

31015

DATE

6/14/22

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 large amount of ingesta is present within the lumen of the *stomach*. The gastric wall is within normal limits in thickness and the wall layers are well defined. Ineffective peristalsis is noted, i.e., a "to an fro" motion is observed.

Duodenum: Severely thickened, 0.44 cm. wall layers are well defined, however, the mucosa and muscularis are thicker than normal and moderate to severe fogging is present.

Jejunum: Severely thickened, measuring up 0.37 cm. Although the definition of the wall layers is preserved, the muscularis is severely thickened and fogging of both the muscularis and the mucosa is present.

A large amount of ingesta is present in the small intestines.

No abnormalities or observed with the ileocecal colic junction.

The colonic wall is not thickened and mural detail is considered normal. Gas and semi-formed stools are noted in the colon.

Pancreas

The right limb is not well visualized due to the large amount of gas and ingested in the surrounding gastrointestinal tract. However, the mesentery in that region is severely hyperechoic.

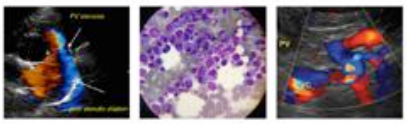
The left limb appears mildly hypoechoic with a hyperechoic mesentery surrounding the left cranial quadrant. Active pancreatitis may be present, however inflammation secondary to gastrointestinal inflammation may be the cause of the changes visualized.

Other

Lymph nodes

Multiple lymph nodes are more prominent than usual. Some remain within normal limits in diameter, but are rounder and more plump than usual, while others are longer than usual.

Lymph nodes in the region of the mesenteric root are enlarged and prominent: 0.52 cm in diameter x 1.82 cm in length.



PATIENT

Missy Allen

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Spayed Female

AGE

6 years

WEIGHT

4 lbs

INTERPRETED BY

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

IMAGING PERFORMED BY

Sarah Pender, CVT

HOSPITAL NAME

SVS Imaging QC

REFERRING VET

Dr. Narske

INVOICE

31015

DATE

6/14/22

Abdominal effusion

A scant amount of anechoic effusion is visualized between loops of bowel (jejunum) in the caudal abdomen in the region of the urinary bladder and dorsal to the liver. The volume is insufficient to obtain a sample.

Mesentery

The mesentery throughout the abdomen is hyperechoic.

ULTRASONOGRAPHIC FINDINGS

- **Gastrointestinal tract**: A large amount of ingesta is present within the lumen of the stomach. A *delay in gastric emptying* is suspected if Missy was fasted. *Very severe inflammatory bowel disease* is suspected (i.e. severe thickening of the small intestines with preservation of definition of wall layers and other signs of inflammation of mucosa and muscularis). Although less likely, neoplasia, such as lymphoma or mast cell tumour, cannot be excluded despite preservation of wall architecture.
- **Lymph nodes**: *Mild lymphadenomegaly* is suggestive of reactive hyperplasia, however, one cannot exclude early infiltration of neoplastic cells.
- **Effusion**: The scant amount of effusion is insufficient to aspirate. It may occur due to vasculitis, extravasation, (i.e., increased permeability of the GI tract). There are no signs of an obstruction.
- **Spleen**: Mild hypovolemia may be present based on the size of the spleen.
- **Pancreas**: mild pancreatitis is suspected. It is difficult to determine whether it is primary versus a reaction to the severe inflammation in the surrounding vicinity.
- **Liver**: Hepatic lipidosis is suspected. Cholestasis, and cholangitis/cholangiohepatitis are considered less likely, but cannot be excluded.
- **Gallbladder**: Trivial amount of gallbladder **sludge**, which is most likely clinically insignificant. However, gastroesophageal reflux disease (GERD), can occur in some patients. Although sonographic signs of cholecystitis are not appreciated, *suppurative cholecystitis* may occur due to ascending bacterial infections from the GI tract. Obtaining a history regarding signs of GERD from the client is suggested. Treatment with an anti-acid or proton pump inhibitor may be required.
- *Underlying triaditis* cannot be excluded.
- **Kidneys**: The left kidney is smaller than the right, however, its architecture is within normal limits; this may be normal for Missy. There are no obvious signs of pyelonephritis.
- **Urinary bladder**: The *debris* is likely composed of mucus, crystalline material and exfoliated cells. A urinary tract infection is considered unlikely based on the absence of inflammatory changes to the mucosa of the bladder wall.

PATIENT

Missy Allen

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Spayed Female

AGE

6 years

WEIGHT

4 lbs

INTERPRETED BY

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

IMAGING PERFORMED BY

Sarah Pender, CVT

HOSPITAL NAME

SVS Imaging QC

REFERRING VET

Dr. Narske

INVOICE

31015

DATE

6/14/22

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The following are suggested/recommended

Endoscopy and biopsies of the stomach, and both the small and large intestines, even if no history of diarrhea.

+/- fine needle aspirates of the lymph nodes, although a diagnosis of reactive hyperplasia is likely.

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.

Deworm depending on risk of exposure, including other pets in house that go outdoors

Diet trial (veterinary prescription brand hypoallergenic, i.e., hydrolyzed or novel protein); ensure appetizing to prevent hepatic lipidosis, sarcopenia and cachexia

Serum cobalamin, and folate, to assess for underlying maldigestion and malabsorption disease and dysbiosis. If cost prohibitive, supplement with cobalamin.

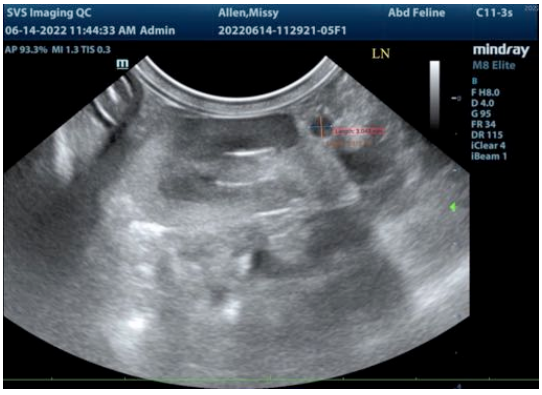
14-21 day trial with famotidine or **omeprazole** (0.7-1 mg/kg PO q12h) due to hematemesis

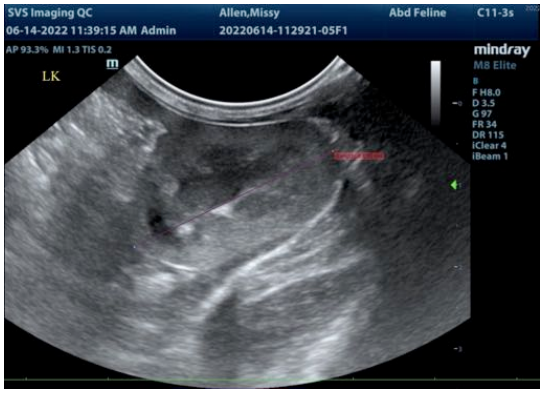
Sucralfate may be necessary, although risk of nausea

Treatment of nausea; metoclopramide may be more effective compared to maropitant in some patients.

Small, frequent meals

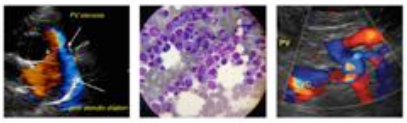
Due to possible triaditis, cholestasis, cholangitis/cholangiohepatitis and cholecystitis cannot be excluded, including and secondary ascending bacterial infections. Although indiscriminate use of antibiotics is not normally recommended, one could begin treatment with a broad-spectrum antibiotic and assess clinical response. *If a response is observed, continue antibiotics for a total of 4 to 6 weeks.





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

Missy Allen

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Spayed Female

AGE

6 years

WEIGHT

4 lbs

INTERPRETED BY

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

IMAGING PERFORMED BY

Sarah Pender, CVT

HOSPITAL NAME

SVS Imaging QC

REFERRING VET

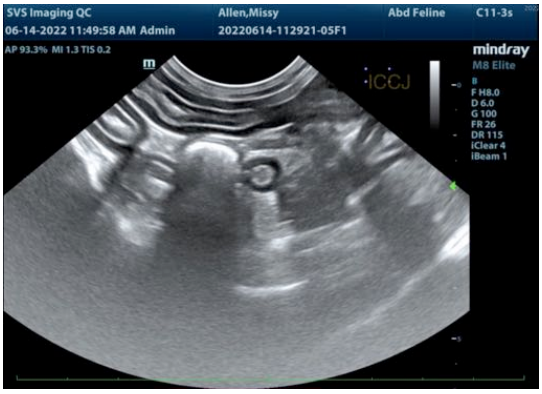
Dr. Narske

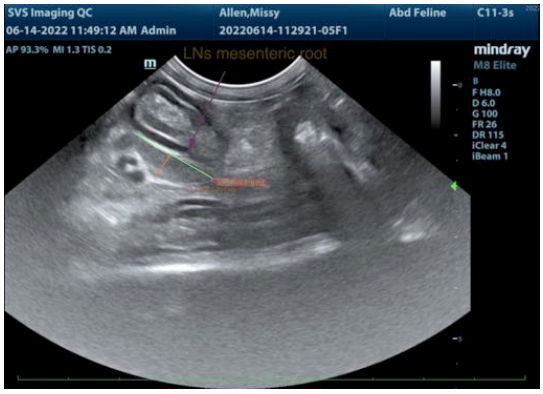
INVOICE

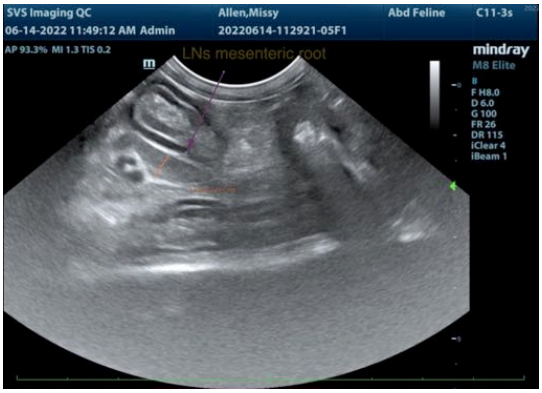
31015

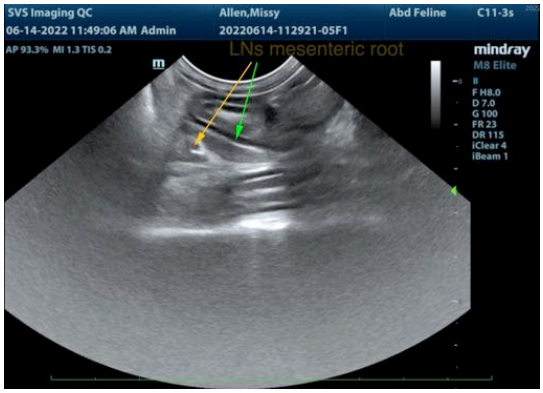
DATE

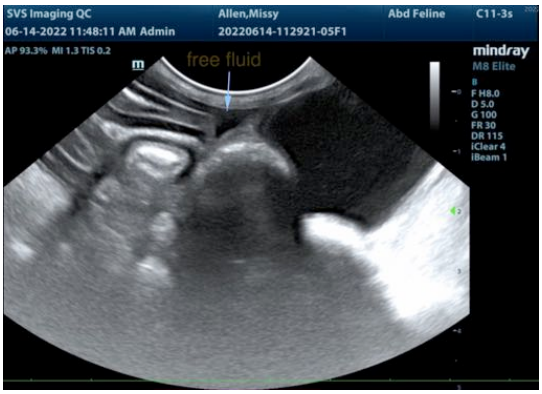
6/14/22

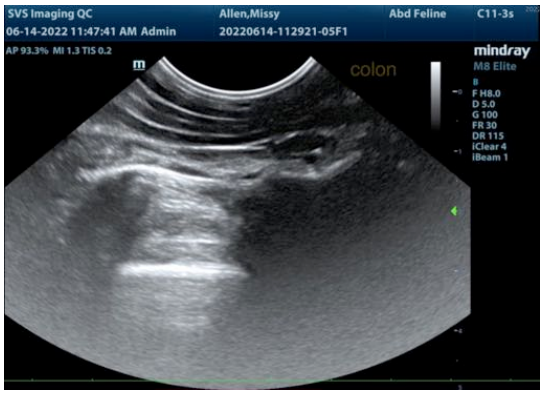


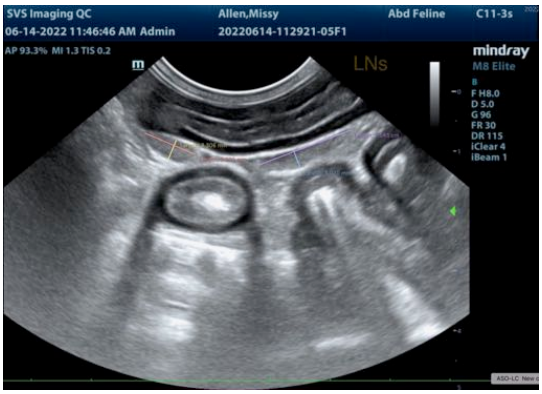


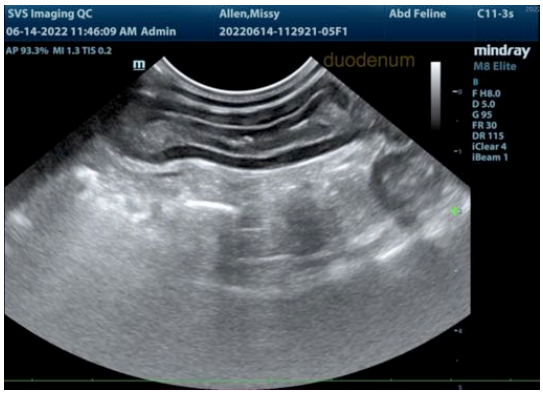


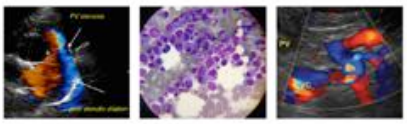












PATIENT

Missy Allen

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Spayed Female

AGE

6 years

WEIGHT

4 lbs

INTERPRETED BY

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

IMAGING PERFORMED BY

Sarah Pender, CVT

HOSPITAL NAME

SVS Imaging QC

REFERRING VET

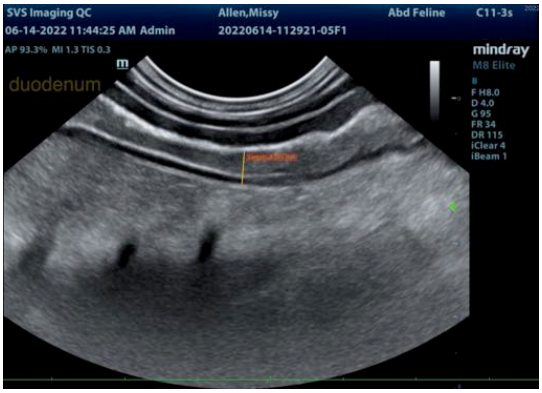
Dr. Narske

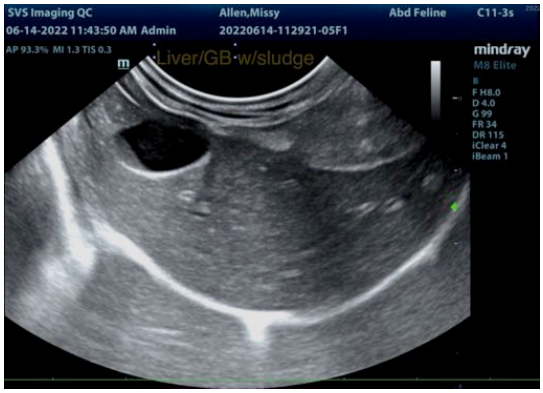
INVOICE

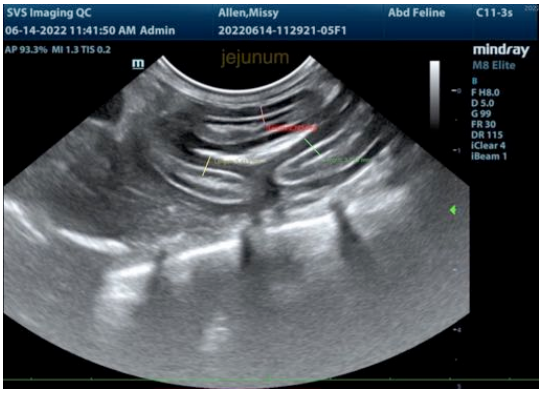
31015

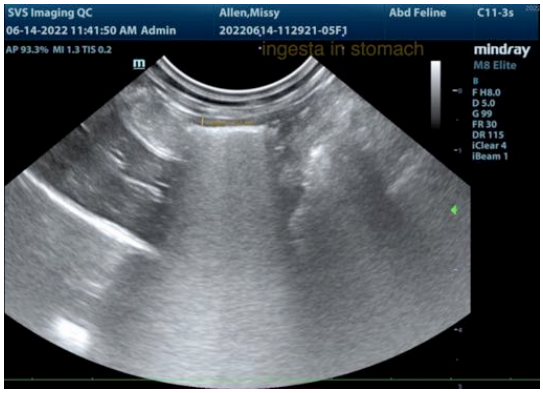
DATE

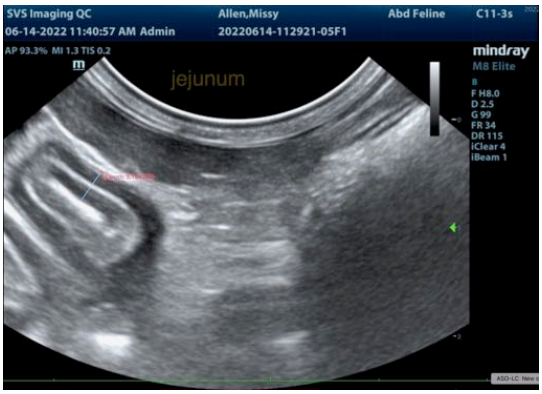
6/14/22

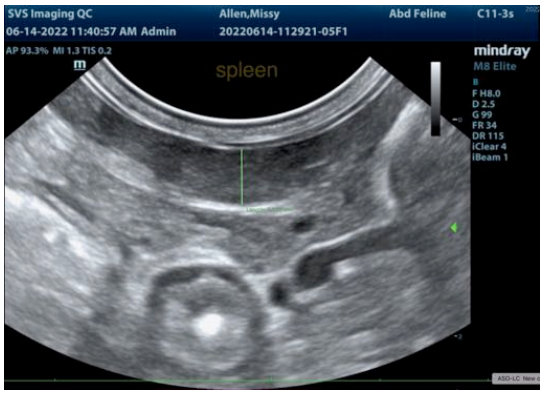


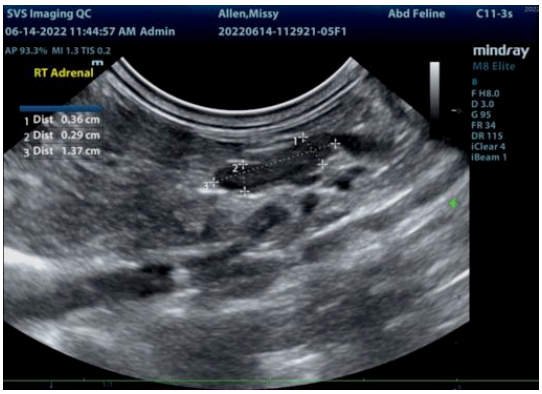


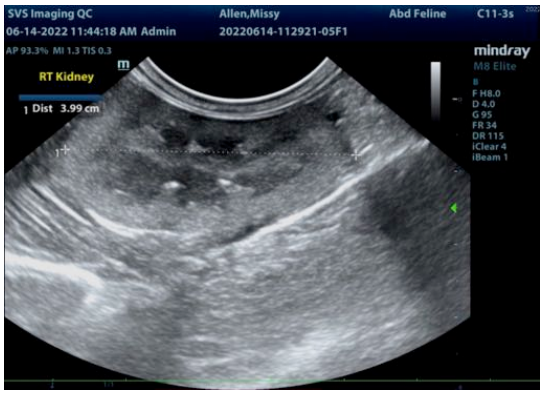






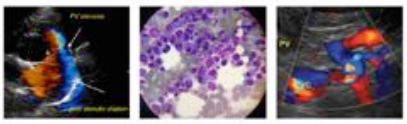






IMAGING PERFORMED BY
svsmobileimaging.com 309 - 737 - 3070

SVS IMAGING



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

PATIENT

Missy Allen

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Spayed Female

AGE

6 years

WEIGHT

4 lbs

INTERPRETED BY

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

IMAGING PERFORMED BY

Sarah Pender, CVT

HOSPITAL NAME

SVS Imaging QC

REFERRING VET

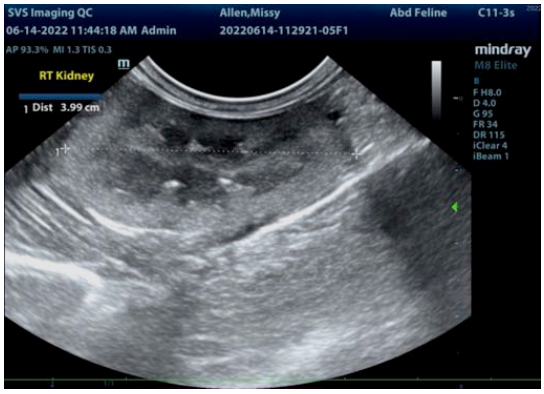
Dr. Narske

INVOICE

31015

DATE

6/14/22



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