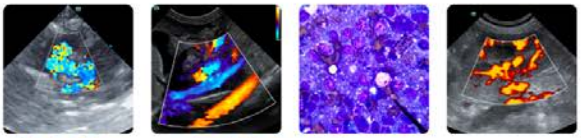


PATIENT

Leo Michunovich

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

13 Years 4 Months

WEIGHT

9.06 lbs

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Shari Reffi, CVT

HOSPITAL NAME

Smithfield Animal Hospital

REFERRING VET

Dr. Boe

INVOICE

72389

DATE

1/22/26

PRESENTING CLINICAL SIGNS

Chronic vomiting. Suspect pancreatitis.

Current Meds: B-12, Metro, Cerenia, Gaba, (torb/midaz)

Lab abnormals: B-12 189; Glucose 63; Cl 103; Tco2 25; Anion Gap 28; Monos 576; Eos 202; TLI 118

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is adequately distended. It has a normal uniform wall thickness. Contents include primarily anechoic fluid with occasional echogenic non-shadowing debris, most consistent with incidental suspended lipid in a cat, possibly combined with exfoliated cells, mucous and/or small blood clots. Both sterile inflammation as well as urinary tract infection can also present with echogenic debris. No masses or definitive cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Kidneys are overall normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of pyelectasia, mineral or infarcts observed. Left kidney measures 3.33 cm. Right kidney measures 3.76 cm.

Adrenal Glands

The right adrenal gland is normal in size (0.46 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.41 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Spleen

The 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). No focal nodules or masses are observed. Splenic vasculature appears normal.

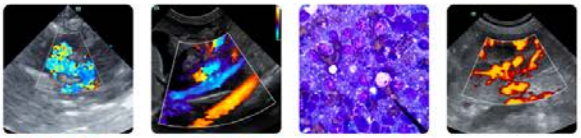
Liver

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. No focal lesions are observed. 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 visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended primarily with fluid, as well as a small to moderate amount of echogenic non-shadowing luminal contents and gas consistent with normal ingesta. In several views, however, approaching the



PATIENT
Leo Michunovich

SPECIES
Feline

BREED
DSH

SEX
Neutered Male

AGE
13 Years 4 Months

WEIGHT
9.06 lbs

INTERPRETED BY
Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY
Shari Reffi, CVT

HOSPITAL NAME
Smithfield Animal Hospital

REFERRING VET
Dr. Boe

INVOICE
72389

DATE
1/22/26

pylorus there is an echogenic density with some subtle acoustic shadowing that may represent the ingesta and gas observed elsewhere, but partially obstructive or intermittently obstructive foreign object can't be definitively ruled out.

The visible small intestine demonstrates areas of moderately thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). Small intestinal submucosa is slightly irregular, thick and hyperechoic, without evident loss of layering appreciated. Fluid is present in the lumen.

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

Pancreas

The pancreas that is observed appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no visible free peritoneal effusion noted in these images.

There is no apparent pathologic lymphadenopathy noted in these images.

PRIMARY FINDINGS

- Moderate inflammatory bowel disease (IBD) pattern – Thick muscularis has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma. No loss of layering or distinct characteristics of malignancy are present. Therefore, differentials cannot be further ranked without tissue sampling.

- The mildly distended stomach and fluid distended bowel combined with the subtly shadowing object within some views of the pylorus make ruling out a partial obstruction potentially secondary to foreign material difficult. Having said that, foreign material is not definitively confirmed, nor is a full obstruction pattern, plication, etc. Therefore, follow up imaging after another 12-24 hours of fasting could potentially be considered prior to more invasive measures.

SECONDARY FINDINGS

- Moderate amount of echogenic urinary bladder debris.

- Age related kidney changes.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The patient's bowel wall appearance combined with the reported low cobalamin, etc. are suggestive of possible infiltrative bowel disease, likely contributing to patient's reported vomiting. Therefore, if supportive/symptomatic medical management has not been helpful, ultimately biopsies of the GI tract, being sure to include ileum, if possible, may be necessary for a definitive diagnosis and therefore to further guide medical management.

PATIENT

Leo Michunovich

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

13 Years 4 Months

WEIGHT

9.06 lbs

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Shari Reffi, CVT

HOSPITAL NAME

Smithfield Animal Hospital

REFERRING VET

Dr. Boe

INVOICE

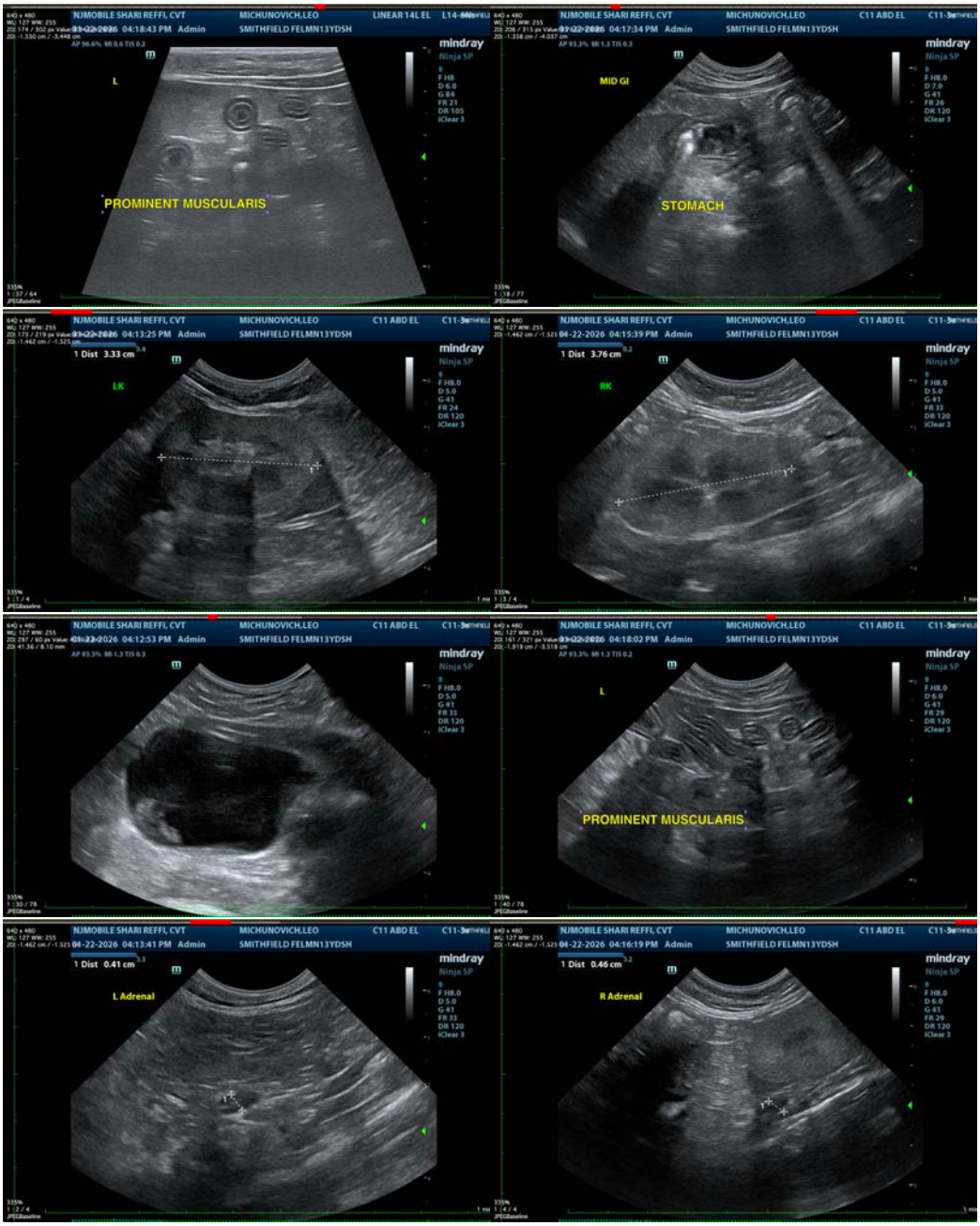
72389

DATE

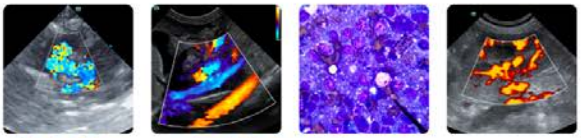
1/22/26

In the meantime, if biopsies cannot be obtained, empirical therapies could include a probiotic (if diarrhea is present, such as visbiome or proviable), empirical deworming with a 5-day course of Panacur and, if tolerated, a transition in diet, based on trial-and-error response, beginning with a hydrolyzed protein diet. Some patients respond to one brand/version of a hydrolyzed protein diet better than another brand, so several trials may be required.

Additional considerations do include cobalamin supplementation and could include prednisolone (if not contraindicated based on patient contraindications, co-morbidities, etc.).



New Jersey Mobile
FUELED BY SONOPATH VETERINARY ULTRASOUND



Clinical Sonography & Telecytology
Educational Teleconsultation Services™

SonoPath www.SonoPath.com info@sonopath.com 800.838.4268

PATIENT

Leo Michunovich

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

13 Years 4 Months

WEIGHT

9.06 lbs

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Shari Reffi, CVT

HOSPITAL NAME

Smithfield Animal Hospital

REFERRING VET

Dr. Boe

INVOICE

72389

DATE

1/22/26

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.

Beth Johnson, DVM, DACVIM
info@sonopath.com