**PATIENT**

Cash Yanke

**SPECIES**

Canine

**BREED**

Lab Mix

**SEX**

Neutered Male

**AGE**

13 years

**WEIGHT**

65 Pounds

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

Sarah Pender, CVT

**HOSPITAL NAME**

SVS Imaging QC

**REFERRING VET**

Dr. Bowers

**INVOICE**

30404

**DATE**

4/18/22

**PRESENTING CLINICAL SIGNS**

Chronic vomiting (usually at night or early morning), coughing/hacking that is mostly responsive to Omeprazole so we are assuming P has some GERD. Is on gabapentin for pain relief, was on Carprofen for arthritis but we discontinued that a few months ago. Recently has started eating cloth items - underwear, socks, dryer sheets. So far has been vomiting them up. P is also eating less and less of his dog food and O thinks he may be losing weight.

Abnormal PE/Chem/CBC/UA Results: CBC, Chem, UA were done 02/28/22 and were unremarkable except for an elevated ALP. It was 857 then. Previously in December it had been 438. Fecal done in Dec was NPSATT.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System**

The urinary bladder is adequately distended with anechoic contents. The wall is smooth and regular. No abnormalities are noted with the trigone or proximal urethra, and there is no evidence of sediment, cystoliths, polyps or a mass.

**Kidneys**

The **left** kidney measures 7.03 cm. The capsule is smooth. The cortex is mildly hyperechoic and a mild loss of the normal definition of the cortico-medullary junction is present. Mineralizations of the diverticulae and pelvis are present, without evidence of nephroliths or pyelectasia. An accumulation of intrapelvic fat is noted. The surrounding mesentery is very mildly hyperechoic.

The **right** kidney measures 6.99 cm. Findings are similar to the left kidney.

**Aortic bifurcation/trifurcation**

No abnormalities observed.

**Adrenal Glands**

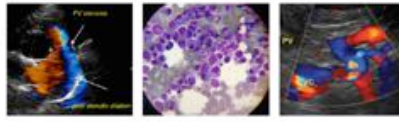
Bilateral adrenomegaly

The **left** adrenal gland measures 0.99 cm at the cranial pole, 0.93 cm at the caudal pole and 3.37 cm in length. An obvious mass is not visualized. 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 1.18 cm at the cranial pole and has a "club shape", however, an obvious mass is not noted. It measures 0.89 cm at the caudal pole and 2.96 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 size, architecture, echogenicity. The capsule is smooth. Perivascular cuffing of multiple blood vessels is observed which is consistent of myelolipomas; these are



**PATIENT**

clinically insignificant. No abnormalities are observed with its vasculature, i.e. congestion and thrombi are not identified.

Cash Yanke

**SPECIES**

**Liver**

Canine

There are no obvious signs of hepatomegaly and its borders are smooth, but mildly rounded. A diffuse, mildly coarse or granular echotexture is observed. Multiple well-defined, hypoechoic nodules of variable size are observed. One of the largest measures 1.60 cm in diameter x 3.68 cm in length. No abnormalities are observed with the hepatic vessels visualized.

**BREED**

Lab Mix

The gallbladder (GB) is moderately distended with a very mild amount of free floating echogenic material. The GB wall is within normal limits in thickness and echogenicity. The hepatic parenchyma surrounding ventral to the GB is hyperechoic, which is suggestive of inflammation. 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.

**SEX**

Neutered Male

**AGE**

13 years

**Gastrointestinal**

A large amount of gas and ingesta are present in the lumen of the stomach. The gastric wall is within normal limits in thickness and the wall layers are well defined. Subjectively, fogging of the mucosa is present. The mesentery surrounding the stomach is hyperechoic. Delayed gastric emptying cannot be excluded if the patient was fasted.

**WEIGHT**

65 Pounds

The small intestinal wall thickness, including the duodenum, is within normal limits and the definition of the wall layers is preserved. The mucosa of the jejunum is more prominent than usual. Abnormally dilated loops of bowel are not observed.

**INTERPRETED BY**

Lisa Carioto, DVM,  
DVSc, Diplomate  
ACVIM

The colonic wall is not thickened and mural detail is considered normal.

**IMAGING PERFORMED BY**

Sarah Pender, CVT

**Pancreas**

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

**HOSPITAL NAME**

SVS Imaging QC

**Other**

**Lymph nodes**

**REFERRING VET**

Dr. Bowers

No abnormalities are observed

**INVOICE**

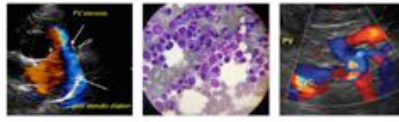
30404

**Abdominal effusion** is not visualized.

**DATE**

4/18/22

**ULTRASONOGRAPHIC FINDINGS**



**PATIENT**

Cash Yanke

- **Bilateral adrenomegaly** may be due to adrenal hyperplasia secondary to stress or chronic illness, however, pituitary dependent hyperadrenocorticism cannot be excluded. An obvious mass is not evident.

**SPECIES**

Canine

- **Possible delay in gastric emptying** is present if Cash was fasted. An ultrasound of the stomach should be repeated after a longer fasting period of approximately 14-20 hours to ensure a mass has not been overlooked (due to the presence of ingesta and gas within the lumen).

**BREED**

Lab Mix

- The **fogging of the mucosa of the stomach and hyperechoic mesentery surrounding the stomach** may be due to inflammation caused by chronic vomiting, but may also be due to underlying inflammation associated with inflammatory bowel disease. Although obvious signs of neoplasia are not visualized, emerging lymphoma cannot be excluded.

**SEX**

Neutered Male

- The presence of **gallbladder sludge** may be clinically significant in Cash's case as he is demonstrating signs of gastroesophageal reflux disease (**GERD**). Treatment with an anti-acid, proton pump inhibitor, and possibly ursodeoxycholic acid, may be required.

**AGE**

13 years

- The **coarse, granular echotexture of the liver** may be due to a reactive hepatopathy. It is moderately heterogeneous, as a result of multiple hypoechoic nodules. The latter may be due to nodular and/or reactive hyperplasia. Although neoplasia is considered less likely, fine needle aspirates would be required to exclude it with certainty.

**WEIGHT**

65 Pounds

- The **renal changes** are attributed to age related degeneration.
- The **hyperechoic splenic nodules** are attributed to myelolipomas and mineralization. There are no obvious signs of neoplasia.

**INTERPRETED BY**

Lisa Carioto, DVM,  
DVSc, Diplomate  
ACVIM

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Although target lesions in the liver are not identified, fine needle aspirates of the hypoechoic nodules would be required to exclude neoplasia with certainty.

**IMAGING PERFORMED BY**

Sarah Pender, CVT

High index of suspicion of GERD and underlying GI disease, such as inflammatory bowel disease, food intolerance, including the development of fat intolerance.

**HOSPITAL NAME**

SVS Imaging QC

Ideally, a re-evaluation of blood work and a urine specific gravity should be performed, including fasting triglycerides

**REFERRING VET**

Dr. Bowers

The following is suggested to exclude underlying gastrointestinal and pancreatic diseases

**INVOICE**

30404

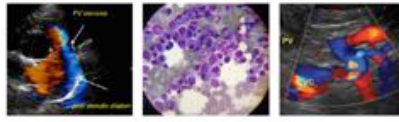
- Deworming, (e.g., fenbendazole), even if receiving monthly heartworm prevention.
- Diet trial (veterinary prescription low fat, hypoallergenic, hydrolyzed or novel protein), for example, Purina HA. Royal Canin Hypo HP possible, but is higher in fat. Low fat, hypoallergenic diets also available through Rayne.
- 10-14 day trial with omeprazole (0.7-1 mg/kg PO q12h) if famotidine at BID dosing not effective
- serum cobalamin, folate, TLI to exclude underlying EPI as cause of weight loss
- Endoscopy and biopsies of the upper and lower GI tract diet, if no response to deworming, diet trials and other suggestions, above
- Empirical treatment with corticosteroids (1 mg/kg/day) possible, IF further diagnostics are not pursued, *following* administration of above treatments

**DATE**

4/18/22

IMAGING PERFORMED BY

svsmobileimaging.com 309-737-3070



Clinical Sonography & Telectyology

EDUCATIONAL TELECONSULTATION SERVICES™

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

**PATIENT**

Cash Yanke

**SPECIES**

Canine

**BREED**

Lab Mix

**SEX**

Neutered Male

**AGE**

13 years

**WEIGHT**

65 Pounds

**INTERPRETED BY**

Lisa Carioto, DVM,  
DVSc, Diplomate  
ACVIM

**IMAGING  
PERFORMED BY**

Sarah Pender, CVT

**HOSPITAL NAME**

SVS Imaging QC

**REFERRING VET**

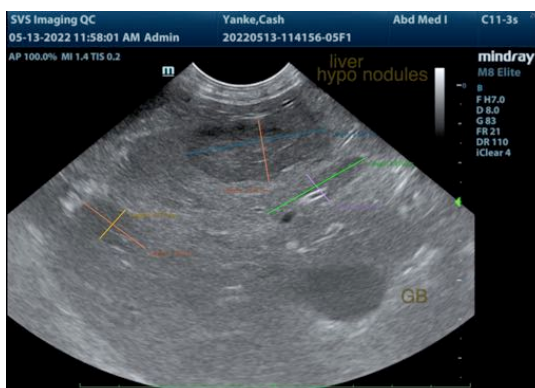
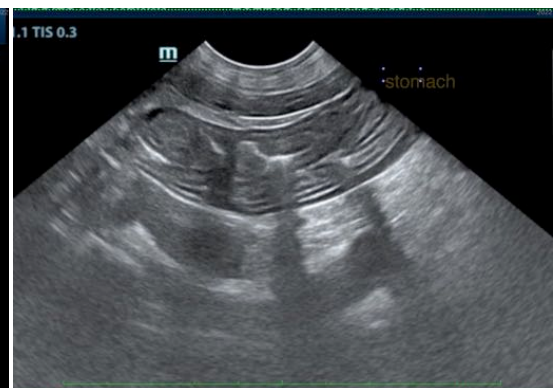
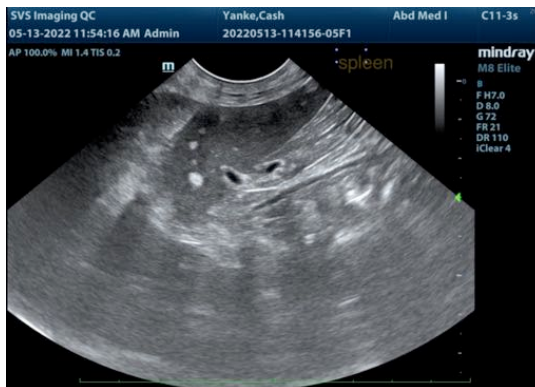
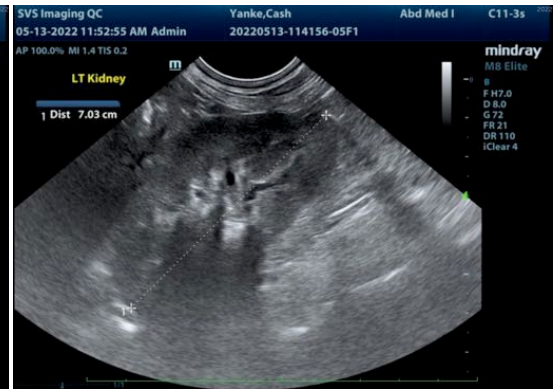
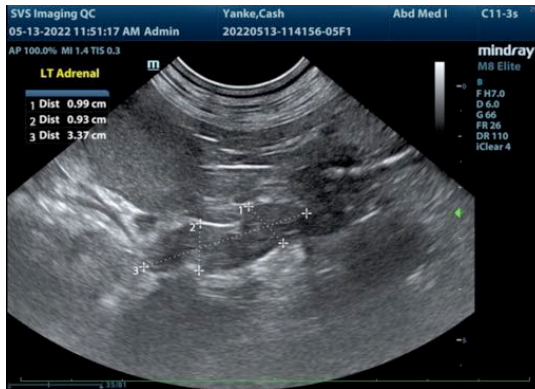
Dr. Bowers

**INVOICE**

30404

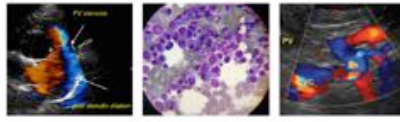
**DATE**

4/18/22



IMAGING PERFORMED BY

svsmobileimaging.com 309-737-3070



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

**PATIENT**

Cash Yanke

**SPECIES**

Canine

**BREED**

Lab Mix

**SEX**

Neutered Male

**AGE**

13 years

**WEIGHT**

65 Pounds

**INTERPRETED BY**

Lisa Carioto, DVM,  
DVSc, Diplomate  
ACVIM

**IMAGING  
PERFORMED BY**

Sarah Pender, CVT

**HOSPITAL NAME**

SVS Imaging QC

**REFERRING VET**

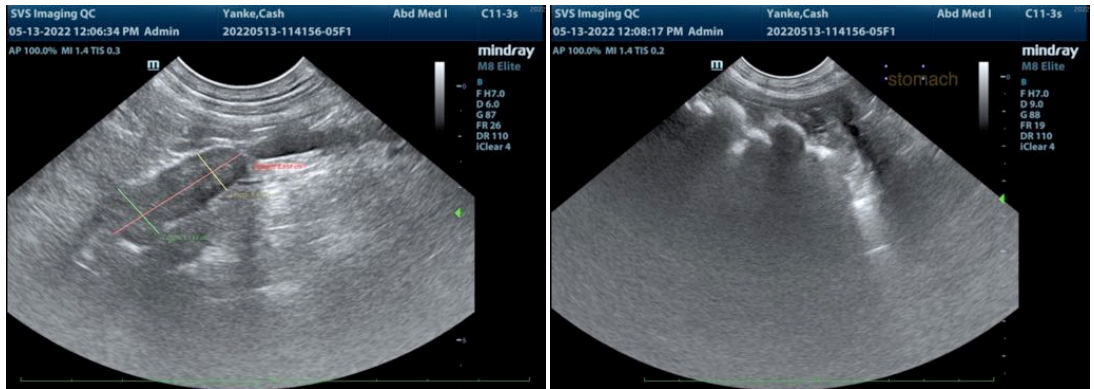
Dr. Bowers

**INVOICE**

30404

**DATE**

4/18/22



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](mailto:Lisa.Carioto@sonopath.com)