



**PATIENT**

Chubby Zirkle

**SPECIES**

Feline

**BREED**

Domestic Shorthair

**SEX**

Neutered male

**AGE**

1 year

**WEIGHT**

10 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Mack

**HOSPITAL NAME**

Northside VC

**REFERRING VET**

Dr. Mack

**INVOICE**

99950

**DATE**

4/26/22

**PRESENTING CLINICAL SIGNS**

Chronic vomiting with blood sometimes. On C/D diet. We have dewormed several times and treated with gi protocol with temporary success however recurs within a few weeks of discontinued treatment  
Abnormal PE/Chem/CBC/UA Results: Fecal: Negative CBC: WNL CHEM:Crea 0.7, BUN 15, TP 4.9, ALB 2.1, CHOL 42

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes was noted. Ureteral papillae were normal.

The **kidneys** revealed normal size and structure, corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex and no evidence of pelvic dilation was present. The capsules were acceptably uniform without significant irregularities. Trace medullary rim sign was noted. The left kidney measured 3.5 cm. The right kidney measured 3.5 cm.

**Adrenal Glands**

Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The left adrenal gland measured 0.4 cm. The right adrenal gland measured 0.4 cm.

**Spleen**

The **spleen** was slightly enlarged with subtle reticulated pattern.

**Liver**

The **liver** images submitted revealed subjectively normal liver size, contour, and structure. Parenchymal echogenicity was naturally coarse and hypoechoic to the spleen. Vascular and biliary tracts were of normal volume with no evidence of congestion. The gallbladder presented acceptably thin walls with primarily anechoic content. The cystic and common bile ducts were normal. No pathological hepatic lymphadenopathy was evident. No overt structural evidence of inflammatory, infiltrative or regenerative pathology was evident.

**Gastrointestinal**

The **gastrointestinal** presentation revealed mild uniform prominence of the gastric mucosa as well as areas of "ropy" small intestinal wall. The muscularis layer was hypertrophied inverting the normal ratio (1:3). The intestinal submucosa was slightly irregular, thickened and hyperechoic suggestive of low



**PATIENT**

Chubby Zirkle

grade, chronic inflammation. Minor stasis was noted in the cecum. No evidence of obstruction was present. Chronic inflammatory bowel disease is probable with a low possibility of an early neoplastic event such as lymphoma or, less likely, dry form FIP can at times be found on biopsy of these presentations. Full thickness tissue biopsies via open laparotomy, ideally guided by intraoperative ultrasound in order to obtain the most representative mural sample, would be necessary to rule more significant disease than IBD.

**SPECIES**

Feline

**BREED**

Domestic Shorthair

**Pancreas**

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

**SEX**

Neutered male

**ULTRASONOGRAPHIC FINDINGS**

Diffuse intestinal thickening with hypertrophied muscularis.

**AGE**

1 year

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Neoplastic criteria is not present. The albumin loss may be GI related if no significant proteinuria is present. Full thickness intestinal biopsies would be ideal given the patient's history. I am concerned for underlying inflammatory bowel with idiopathic muscularis hypertrophy. Dry form FIP is a mild potential especially given the minor medullary rim sign. Given the lack of success with empirical management full thickness intestinal biopsies are strongly encouraged.

**WEIGHT**

10 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Mack

**HOSPITAL NAME**

Northside VC

**REFERRING VET**

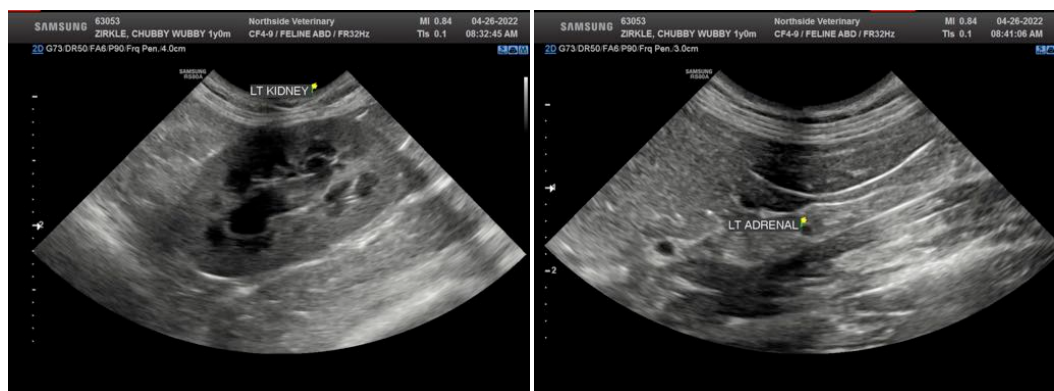
Dr. Mack

**INVOICE**

99950

**DATE**

4/26/22





**PATIENT**

Chubby Zirkle

**SPECIES**

Feline

**BREED**

Domestic Shorthair

**SEX**

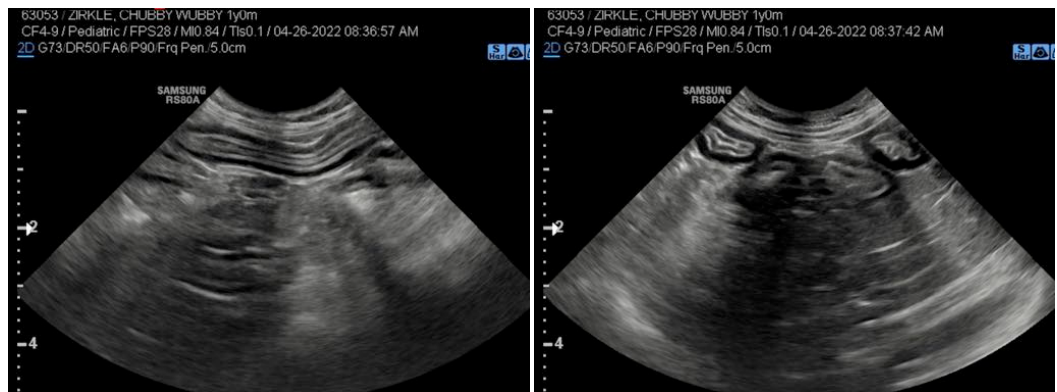
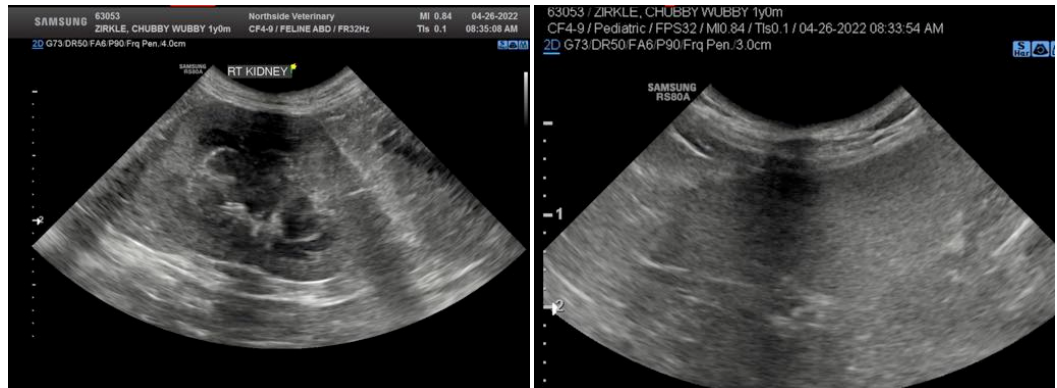
Neutered male

**AGE**

1 year

**WEIGHT**

10 lbs



**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Mack

**HOSPITAL NAME**

Northside VC

**REFERRING VET**

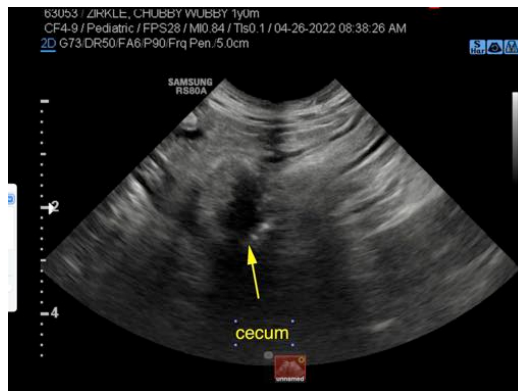
Dr. Mack

**INVOICE**

99950

**DATE**

4/26/22



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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com  
info@SonoPath.com