

Approach to Vomiting & Diarrhea in Cats

Investigating chronic gastrointestinal disease

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Gastrointestinal (GI) disorders are among the most common problems encountered in Feline Medicine. Most vomiting and diarrhea episodes occur suddenly and resolve quickly. However, some patients may present vomiting and/or diarrhea over a period of weeks to months. These chronic digestive disorders are associated with gastrointestinal disorders as well as non-gastrointestinal tract related conditions. Chronic kidney failure, chronic pancreatitis, cholangitis, or hyperthyroidism in older cats are common causes of chronic vomiting and/or diarrhea. Chronic enteropathy (CE) is a common disorder in cats, especially in the older cat population and its prevalence has increased over the past 2 decades. Differentiating chronic inflammatory enteropathy from intestinal low-grade lymphoma in cats can be difficult because physical examination findings, laboratory data, diagnostic imaging findings, and even histopathologic features frequently overlap. The terminology for CE in cats used in the literature varies. Terms commonly used to describe inflammatory lesions are inflammatory bowel disease (IBD), lymphoplasmacytic enteritis (LPE), and eosinophilic enteritis. Terms commonly found to describe neoplastic lesions are small cell lymphoma, low-grade lymphoma, alimentary lymphoma (AL), lymphosarcoma, enteropathy-associated T-cell lymphoma (EATL), monomorphic epitheliotropic intestinal T-cell lymphoma (MEITL), and low-grade intestinal T-cell lymphoma (LGITL). The new ACVIM consensus statement proposed the following terms:

- Chronic enteropathy for cats with chronic (at least 3 weeks' duration) signs of gastrointestinal disease where extragastrointestinal, metabolic, and infectious causes have been ruled out.
- Lymphoplasmacytic enteritis for inflammatory lesions in the gastrointestinal tract of cats with CE that are dominated by lymphocytic infiltration in the lamina propria.
- Low-grade intestinal T-cell lymphoma for lesions in the gastrointestinal tract of cats with CE characterized by a monomorphic infiltration of the lamina propria or epithelium or both of cats with small, mature, neoplastic (clonal) T lymphocytes.

Diagnostic Workup

The first step in the approach to chronic digestive signs in cat is to rule out potential causes originating outside the GI tract (eg. hyperthyroidism, chronic kidney disease and other conditions). A careful investigation of the patient's history including thorough diet history, general feeding habits, environment and current medication should be discussed. In case of chronic vomiting with hematemesis, bloody diarrhea or localized signs such as abdominal pain or jaundice, a more aggressive work-up is necessary. If

diarrhea is present, the patient's history should also help to distinguish between small or large intestinal origin, though making a distinction between these localizations may be sometimes difficult in cats. Some cats with GI disease may present with weight loss only and have no history of vomiting or diarrhea. Both decreased appetite and polyphagia has been reported in cats with GI disease and many cats have normal appetite. There are currently no known pathognomonic signalment or clinical findings that can reliably distinguish between LPE and LGITL in cats, because both conditions overlap with a wide range of presentations, including no clinical signs at all. Physical examination can reveal abnormal findings such as loss of body condition score and muscle mass, dehydration, thickened intestinal loops, mesenteric lymphadenopathy or abdominal pain. The neck should also be palpated for a possible thyroid slip.

Standard diagnostic tests such as complete blood count, a biochemical profile, a urinalysis, FeLV/FIV testing, and a total T4 are indicated to determine whether the GI signs are primary or secondary to an extra-gastrointestinal disease. Abnormalities on the CBC may include anemia, leukocytosis or leukopenia, eosinophilia. Abnormalities on the biochemical profile may include hyperproteinemia (chronic inflammation), hypoproteinemia (protein loss in the GI tract - this is less common in cats) and increased liver enzymes.

It is also important to exclude the presence of gastro-intestinal parasites. A fecal flotation and sedimentation should be performed if possible. Even with a negative result, a therapeutic trial using fenbendazole 50mg/kg SID PO for 5 days should be considered. *Tritrichomonas foetus* should also be done in cats particularly in high density populations of young purebred cats. *T. foetus* is a flagellated protozoal parasite that colonizes the feline colon and distal ileum. The most frequent clinical sign of *T. foetus* infection is chronic large bowel diarrhea occasionally with mucus or fresh blood. Some cats do not show any clinical signs. Polymerase chain reaction using DNA extracted from feces are the most commonly used diagnostic methods for *T. foetus* infection in cats.

Dietary treatment trials

Complete dietary treatment trials should entail exclusive feeding of a therapeutic diet (eg. highly digestible, limited-ingredient novel protein, hydrolyzed protein, fiber-enriched) exclusively for at least 2 weeks. The choice of therapeutic diet should be selected based on diet history, GI signs, and pertinent physical examination and diagnostic findings. The new ACVIM-endorsed statement: consensus statement and systematic review on guidelines for the diagnosis and treatment of chronic inflammatory enteropathy in dogs suggests at least 3 trials with different diets should be considered, if possible; however in cats these diet trials may be more challenging due to palatability issues.

Further diagnostics

In cats presenting with chronic digestive disease and systemic signs such as lethargy, rapid weight loss and/or in cats which are not responding to the treatments above, additional work up is needed. This consists in additional laboratory testing (serum cobalamin, folate, feline trypsin-like immunoreactivity (fTLI) to rule out EPI, feline pancreatic lipase immunoreactivity (fPLI) to check for pancreatitis. Laboratory tests cannot differentiate between LPE and LGITL and currently there are no specific cancer markers for LGITL in cats. Abdominal radiographs are generally not very sensitive in ruling out conditions such as gastrointestinal, pancreatic or hepatic disease. An abdominal ultrasound is preferred and can reveal abnormalities in the gastrointestinal wall (changes in intestinal wall layering, focal or diffuse thickening), abnormal mesenteric lymph nodes, signs of cholangitis and/or pancreatitis. Ultrasound guided needle aspiration is used to sample peritoneal fluid if present and is also useful for non-invasive sampling of enlarged abdominal lymph nodes or abnormal abdominal organs. Abdominal ultrasonography is an important diagnostic tool in the diagnostic evaluation of cats with CE. It allows for cross-sectional evaluation, anatomical localization, characterization of bowel wall mural architecture, and mesenteric lymph nodes as well as evaluation of other abdominal organs. The sonographic abnormalities of CE have been well described, however, substantial crossover between the LGITL and LPE exists and clinically relevant pathology can be present in the bowel with a normal ultrasound appearance. Thus, currently no imaging technology reliably differentiates LPE from LGITL, and intestinal histopathology is required for establishing the diagnosis of CE. Although cytology is helpful to exclude important differential diagnoses in cats with CE, cytology cannot be used to differentiate LPE from LGITL.

The collection of intestinal tissue biopsy specimens is the current standard test for the diagnosis of and differentiation between LPE vs LGITL in cats. No clearly demonstrated superiority in quality exists for biopsy specimens obtained by laparotomy (full thickness) vs endoscopic biopsy specimens, because poor technique can affect sample quality and hamper diagnostic evaluation for both methods. It has been shown that all inflammatory and neoplastic lesions are present in the lamina propria and hence, if mucosal samples of sufficient quality are procured endoscopically, a diagnosis is possible without obtaining full-thickness biopsy specimens. However, because of limited access to the jejunum by endoscopy, jejunal lesions cannot be reliably sampled although this small intestinal segment is frequently abnormal.

Histology is required for the diagnosis and differentiation of LPE from LGITL in cats. It requires proper sampling, processing, and interpretation of key lesions (which includes inflammatory infiltrates, neoplastic cells, and other intestinal wall changes). Ambiguous cases often require ancillary tests such as immunohistochemistry and clonality tests. Clonality can be an important part of the diagnostic evaluation of cats with CE. However, clonality must be interpreted in conjunction with clinical, histopathological, and immunohistochemical results and cannot be used as a sole means to reclassify cases.

References

1. Marsilio S, Freiche V, Johnson E, Leo C, Langerak AW, Peters I, Ackermann MR. ACVIM consensus statement guidelines on diagnosing and distinguishing low-grade neoplastic from inflammatory lymphocytic chronic enteropathies in cats. *J Vet Intern Med*. 2023 May-Jun;37(3):794-816. doi: 10.1111/jvim.16690.
2. Romy M Heilmann, Albert E Jergens, Aarti Kathrani, Karin Allenspach, Silke Salavati Schmitz, Simon L Priestnall, Julien R S Dandrieux, Annette M O'Connor, ACVIM–endorsed statement: consensus statement and systematic review on guidelines for the diagnosis and treatment of chronic inflammatory enteropathy in dogs, *Journal of Veterinary Internal Medicine*, Volume 40, Issue 1, January-February 2026, aalaf017, <https://doi.org/10.1093/jvimsj/aalaf017>
3. Baez JL, Hendrick MJ, Walker L. *et al*. Radiographic, ultrasonographic, and endoscopic findings in cats with inflammatory bowel disease of the stomach and small intestine: 33 cases (1990-1997). *J Am Vet Med Assoc* 1999; 215: 349-354.
4. Evans SE, Bonczynski JJ, Broussard JD, *et al*. Comparison of endoscopic and full-thickness biopsy specimens for diagnosis of inflammatory bowel disease and alimentary tract lymphoma in cats. *J Am Vet Med Assoc* 2006; 229: 1447-1450.
5. Gookin JL, Birkenheuer AJ, Breitschwerdt EB, *et al*. Single-tube nested PCR for detection of *Tritrichomonas foetus* in feline feces. *J Clin Microbiol* 2002; 40: 4126-4130.
6. Day MJ, Bilzer T, Mansell J, *et al*. Histopathological standards for the diagnosis of gastrointestinal inflammation in endoscopic biopsy samples from the dog and cat: a report from the World Small Animal Veterinary Association Gastrointestinal Standardization Group. *J Comp Pathol* 2008; 138: 1-43.
7. Willard MD, Mansell J, Fosgate GT, *et al*. Effect of sample quality on the sensitivity of endoscopic biopsy for detecting gastric and duodenal lesions in dogs and cats. *J Vet Intern Med* 2008; 22: 1084-1089.
8. Willard MD, Jergens AE, Duncan RB, *et al*. Interobserver variation among histopathologic evaluations of intestinal tissues from dogs and cats. *J Am Vet Med Assoc* 2002; 220: 1177-1182.