

Introduction to Gastric Diseases

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*“Content the stomach and the stomach will content you.”
Thomas Walker (1784-1836)*

CLINICAL IMPORTANCE

Vomiting is the hallmark of gastric disorders in dogs and cats (Box 52-1). Vomiting may be acute or chronic with a long list of possible etiologies (Twedt, 2005; Simpson, 2005). Vomiting requires a forceful coordinated musculoskeletal effort to eject food from the stomach to the mouth.

Table 51-1 lists breed-associated gastric disorders. Certain gastric diseases (gastritis, gastroduodenal diseases and gastric motility/emptying diseases) may also require management with pharmacologic agents (Table 51-2).

Dietary goals are to meet the nutritional requirements of the patient with foods that minimize gastric irritation, promote gastric emptying and normalize gastric motility. In most vomiting cases of less than 48 hours' duration, withholding water for 24 hours and food for 24 to 48 hours generally controls the episode. The patient's regular food should then be gradually reintroduced in small frequent meals over two to three days. Episodes of acute vomiting that occur for longer than three days and cases of chronic vomiting (i.e., persisting longer than 21 days) with signs of malnutrition require more intensive nutritional and medical management.

Chapters 52 through 54 include feeding plans for patients with gastric disorders. Tables in those chapters list the key nutritional factors for such patients as well as tables that include the levels of key nutritional factors of commercial veterinary therapeutic foods marketed for patients with gastric disorders. For comparative purposes, these tables also include the recom-

mended levels of key nutritional factors for patients with gastric disorders.

REFERENCES

The references for Chapter 51 can be found at www.markmorris.org.

Table 51-1. Breed-associated gastric disorders.

Disorders	Breeds
Atrophic gastritis	Lundehund
Chronic hypertrophic gastritis	Basenji
	Drentse patrijshond
Chronic hypertrophic pyloric gastropathy	Lhaso apso
	Maltese dog
	Pekingese
	Shih Tzu
Gastric dilatation-volvulus	Basset hound
	Doberman pinscher
	Gordon setter
	Great Dane
	Irish setter
	Saint Bernard
	Weimaraner
Gastric neoplasia	Beagle
	Belgian shepherd
	Rough collie
	Staffordshire bull terrier
Hemorrhagic gastroenteritis	Dachshund
	Miniature schnauzer
	Toy poodle
Pyloric stenosis	Boston terrier
	Boxer
	Siamese cat

Table 51-2. Pharmacologic agents useful in managing gastritis, gastroduodenal ulceration and gastric motility/emptying disorders.

Antacids	
Mylanta (Al + Mg)	1 to 2 tabs or 5 to 10 ml PO every four to six hours
Amphojel (AlOH)	
Tums (CaCO ₃)	
Antiemetic agents	
Chlorpromazine	0.2 to 0.5 mg/kg body weight, PO, SC, IM every six to eight hours
Prochlorpromazine	0.5 mg/kg body weight, PO, SC, IM every six to eight hours
Odansetron	0.1 to 0.2 mg/kg body weight, SC every eight hours or 0.5 mg/kg body weight, IV (loading dose) followed by 0.5 mg/kg body weight as a constant IV infusion or 0.5 to 1.0 mg/kg body weight, PO every six to eight hours
Metoclopramide	0.2 to 0.4 mg/kg body weight, IM, SC every eight hours or 1.0 mg/kg body weight/day as a constant IV infusion
Butorphanol	0.4 mg/kg body weight, IM or 0.1 mg/kg body weight/hour as a constant IV infusion
Antihistamines	
Diphenhydramine	2 to 4 mg/kg body weight, PO
Dimenhydrinate	25 to 50 mg PO per dog or 12.5 mg PO per cat
Anti-prostaglandin agent	
Misoprostol	1 to 3 µg/kg body weight, PO every eight to 12 hours (dogs)
H₂-receptor blockers	
Cimetidine	5 to 10 mg/kg body weight, PO, SC every six to eight hours
Ranitidine	1 to 4 mg/kg body weight, PO, SC, IV every eight to 12 hours
Famotidine	0.5 to 1.0 mg/kg body weight, PO, IV every 12 to 24 hours
Nizatidine	2.5 to 5.0 mg/kg body weight, PO every 24 hours
Prokinetic agents	
Metoclopramide	0.2 to 0.4 mg/kg body weight, IM, SC every eight hours or 1.0 mg/kg body weight/day as a constant IV infusion
Cisapride	0.25 to 0.5 mg/kg body weight, PO every eight hours*
Erythromycin	0.5 to 1.0 mg/kg body weight, PO every eight hours (dogs)
Proton pump inhibitors	
Omeprazole	0.2 to 0.7 mg/kg body weight, PO every 24 hours (dogs)
Mucosal protectants	
Sucralfate	1 g/25 kg body weight, PO every six to eight hours
Colloidal bismuth	

Key: PO = per os, SC = subcutaneously, IM = intramuscularly, IV = intravenously.

*Available from compounding pharmacies.