American Gastroenterological Association Medical Position Statement: Nausea and Vomiting

This document presents the official recommendations of the American Gastroenterological Association (AGA) on nausea and vomiting. It was approved by the Clinical Practice and Practice Economics Committee and the AGA governing board on May 21, 2000.

Nausea and vomiting are common and distressing symptoms with a myriad of underlying causes. Although most instances of acute nausea and vomiting can be readily diagnosed on clinical grounds alone, chronic nausea and vomiting, defined as symptoms persisting more than 1 month, may present a greater diagnostic and therapeutic challenge.

Assessment of the patient with nausea and vomiting begins with differentiation of these symptoms from bulimia, regurgitation, and rumination and should include a clear delineation of the duration, frequency, and severity of these symptoms together with a description of their characteristics and the nature of any associated symptoms. The physical examination should be directed toward two objectives: a search for any consequences or complications of vomiting per se and identification of any signs that may point to the cause of these symptoms. Thus, for example, vomiting of central origin is usually accompanied by signs and/or symptoms suggestive of an intracranial or labyrinthine lesion. Diagnostic testing should be directed by the clinical picture (Figure 1). Thus, symptoms suggestive of gastrointestinal obstruction should prompt appropriate radiologic studies, and complaints consistent with upper gastrointestinal mucosal disease are best evaluated by esophagogastroduodenoscopy. Although well-documented disorders of enteric nerve and muscle such as the pseudo-obstruction syndrome may result in nausea and vomiting, the role of gastrointestinal dysmotility and gastroparesis, in particular, in the patient with isolated chronic nausea and vomiting remains unclear. Although gastroparesis is common among patients in this category, its primacy remains in dispute, and the interrelationships between such entities as functional and psychogenic vomiting, idiopathic gastroparesis, and functional dyspepsia remain unclear. For these same reasons, the place of such tests of motor function as gastric emptying studies, electrogastrography, and manometry have not been defined, and the yield of such diagnostic studies has not been adequately compared with a therapeutic trial of an antiemetic and/or prokinetic agent. For the moment, reluctance to accept gastroparesis per se as the primary cause of these symptoms seems appropriate and prudent. The clinician should consider psychogenic factors and a psychologic evaluation in the assessment of patients with chronic unexplained nausea and vomiting.

Management of nausea and vomiting should include, first, recognition and correction of any consequences or complications; second, identification, wherever possible, of the underlying cause(s), followed by appropriate therapy; and third, where necessary, therapeutic strategies to suppress or eliminate symptoms. With regard to the first, particular attention must be paid to recognition and replacement of any depleted fluid, electrolyte, vitamin, trace element, or nutrient, as well as identification and correction of acid–base and metabolic disturbances. Symptomatic therapy should be based on symptom severity and clinical context. Thus mild nausea and uncomplicated vomiting may be treated empirically with oral antiemetics, whereas severe intractable episodes require parenteral administration of such agents as phenothiazines, butyrophenones, or metoclopramide. The management of these symptoms in specific clinical contexts reflects, in large part, our understanding of the pathophysiology of these symptoms and the neuropharmacology of available agents. Thus, motion sickness and related disorders are treated primarily with histamine H1 and muscarinic, cholinergic M1-receptor antagonists, whereas the prevention and treatment of both acute cancer chemotherapy-related and postoperative nausea and vomiting have come to be based largely on the use of serotonergic 5-HT3–receptor antagonists; when gastroparesis is thought to play a causative or contributory role, prokinetic agents may
prove particularly effective. It must be conceded that, with the notable exception of postchemotherapy and postoperative nausea and vomiting, relatively few controlled trials have compared either various therapeutic strategies or available pharmacologic agents in the symptomatic therapy of nausea and vomiting.

Figure 1. Algorithm for the evaluation and management of nausea and vomiting. There are three basic goals: (1) recognition and correction of any consequences/complications, (2) identification and specific therapy of the primary cause, and (3) suppression/elimination of symptoms. CT, computed tomography; MRI, magnetic resonance imaging; AXR, abdominal x-ray; EGD, esophagogastroduodenoscopy; GERD, gastroesophageal reflux disease; T4, serum thyroxine; SBS, small bowel series; UGI, upper gastrointestinal; GET, gastric emptying test; EGG, electrogastrography; N&V, nausea and vomiting; ADM, antroduodenal manometry.