

endoscopist to visualize the esophagus, the stomach, and the duodenum as far as its third and sometimes fourth portions (Fig. 34-2). Common indications for EGD include evaluation of upper GI symptoms (e.g., dyspepsia, heartburn, nausea, vomiting, dysphagia, odynophagia), screening for and surveillance of Barrett's esophagus, screening for gastroesophageal varices, evaluation of suspected upper GI bleeding (acute or chronic), and investigation of malabsorptive diarrhea (as in celiac sprue or protein-losing enteropathy). A partial list of the therapeutic interventions that can be performed during EGD includes treatment of esophageal varices; dilation of esophageal strictures, rings, and webs; removal or ablation of neoplastic tissue; hemostasis therapy for upper GI bleeding; and the placement of palliative stents for malignant obstruction of the esophagus, pylorus, or duodenum.

Enteroscopy

Examination of the small intestine beyond the ligament of Treitz is not feasible with a standard gastroscope. Recent advances have

allowed direct visualization of the 6 meters or so of the small intestine. *Push* enteroscopy using a long (>200 cm) endoscope allows the endoscopist to both image and biopsy or cauterize lesions in the small intestine. However, because of looping of the endoscope and tortuosity of the small intestine, advancing this instrument beyond the first 50 cm of jejunum can be difficult. Balloon-assisted enteroscopy is a newer technique that provides endoscopic access to most of the small bowel. This method employs balloons, incorporated into overtubes or the endoscope itself, to permit pleating of the small bowel onto the endoscope. By inflating and deflating the balloons in sequence, the enteroscope can be advanced through extremely long stretches of small intestine. With a combined antegrade (through the mouth) and retrograde (through the anus) approach, the entire small intestine can be visualized. Spiral enteroscopy, another novel technique, uses a spiral overtube device that retracts the small bowel over the scope, allowing for deep enteroscopy.

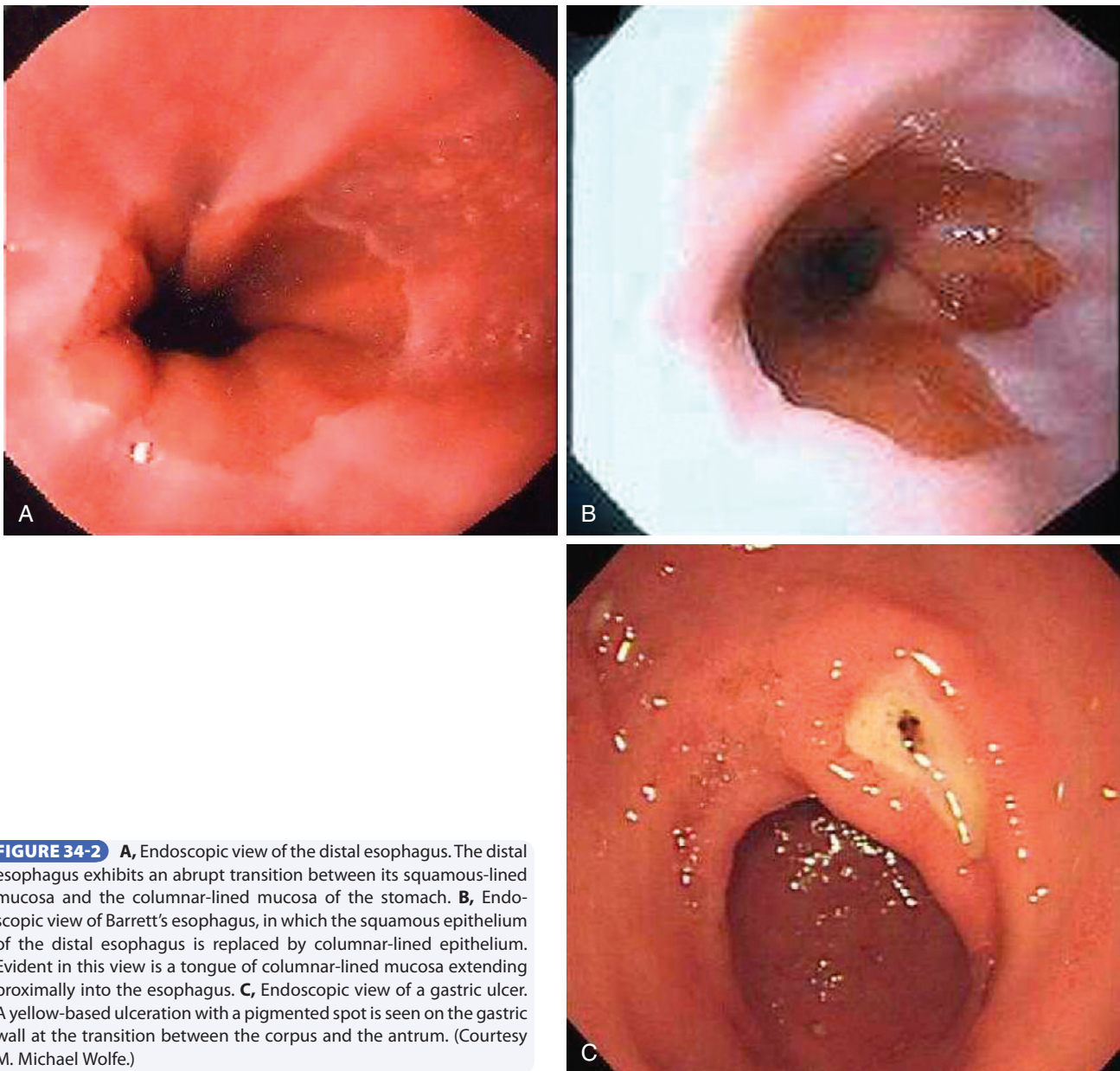


FIGURE 34-2 **A**, Endoscopic view of the distal esophagus. The distal esophagus exhibits an abrupt transition between its squamous-lined mucosa and the columnar-lined mucosa of the stomach. **B**, Endoscopic view of Barrett's esophagus, in which the squamous epithelium of the distal esophagus is replaced by columnar-lined epithelium. Evident in this view is a tongue of columnar-lined mucosa extending proximally into the esophagus. **C**, Endoscopic view of a gastric ulcer. A yellow-based ulceration with a pigmented spot is seen on the gastric wall at the transition between the corpus and the antrum. (Courtesy M. Michael Wolfe.)