

FIGURE 345-38 Causes of esophagitis. **A.** Severe reflux esophagitis with mucosal ulceration and friability. **B.** Cytomegalovirus esophagitis. **C.** Herpes simplex virus esophagitis with target-type shallow ulcerations. **D.** *Candida* esophagitis with white plaques adherent to the esophageal mucosa.

are the best initial diagnostic tests. The oropharyngeal swallowing mechanism, esophageal peristalsis, and the lower esophageal sphincter can all be assessed. In some disorders, subsequent esophageal manometry may also be important for diagnosis.

TREATMENT OF MALIGNANCIES

Endoscopy plays an important role in the treatment of gastrointestinal malignancies. Early-stage malignancies limited to the superficial layers of the gastrointestinal mucosa may be resected using the techniques of endoscopic mucosal resection (EMR) (see Video 346e-4) or endoscopic submucosal dissection (ESD) (see Video 346e-5). Photodynamic therapy (PDT) and radiofrequency ablation (RFA) are effective modalities for ablative treatment of high-grade dysplasia and intramucosal cancer in Barrett's esophagus. Gastrointestinal stromal tumors can be removed en bloc by endoscopic full-thickness resection

(see Video 346e-3). In general, endoscopic techniques offer the advantage of a minimally invasive approach to treatment, but rely on other imaging techniques (such as CT, magnetic resonance imaging [MRI], positron emission tomography [PET], and EUS) to exclude distant metastases or locally advanced disease better treated by surgery or other modalities. The decision to treat an early-stage gastrointestinal malignancy endoscopically is often made in collaboration with a surgeon and/or oncologist.

Endoscopic palliation of gastrointestinal malignancies relieves symptoms and in many cases prolongs survival. Malignant obstruction can be relieved by endoscopic stent placement (Figs. 345-13, 345-33, and 345-36; see Video 346e-15), and malignant gastrointestinal bleeding can often be palliated endoscopically as well. EUS-guided celiac plexus neurolysis may relieve pancreatic cancer pain.

ANEMIA AND OCCULT BLOOD IN THE STOOL

Iron-deficiency anemia may be attributed to poor iron absorption (as in celiac sprue) or, more commonly, chronic blood loss. Intestinal bleeding should be strongly suspected in men and postmenopausal women with iron-deficiency anemia, and colonoscopy is indicated in such patients, even in the absence of detectable occult blood in the stool. Approximately 30% will have large colonic polyps, 10% will have colorectal cancer, and a few additional patients will have colonic vascular lesions. When a convincing source of blood loss is not found in the colon, upper gastrointestinal endoscopy should be considered; if no lesion is found, duodenal biopsies should be obtained to exclude sprue (Fig. 345-42). Small-bowel evaluation with capsule endoscopy (Fig. 345-43), CT or magnetic resonance (MR) enterography, or balloon-assisted enteroscopy may be appropriate if both EGD and colonoscopy are unrevealing.

Tests for occult blood in the stool detect hemoglobin or the heme moiety and are most sensitive for colonic blood loss, although they will also detect larger amounts of upper gastrointestinal bleeding. Patients over age 50 with occult blood in normal-appearing stool should undergo colonoscopy to diagnose or exclude colorectal neoplasia. The diagnostic yield is lower than in iron-deficiency anemia. Whether upper endoscopy is also indicated depends on the patient's symptoms.

The small intestine may be the source of chronic intestinal bleeding, especially if colonoscopy and upper endoscopy are not diagnostic. The utility of small-bowel evaluation varies with the clinical setting and is most important in patients in whom bleeding causes chronic or recurrent anemia. In contrast to the low diagnostic yield



FIGURE 345-39 Peptic esophageal stricture associated with esophagitis.

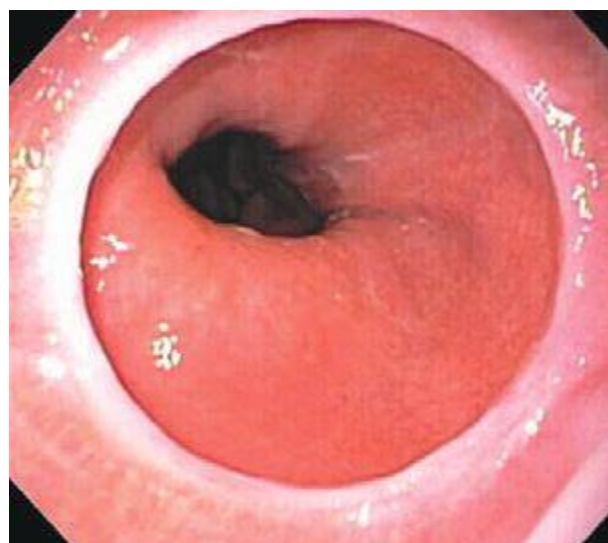


FIGURE 345-40 Schatzki's ring at the gastroesophageal junction.