is characterized by changes in the cells lining the esophagus and an increased risk of developing esophageal cancer (Porth, 2002).

**COLLABORATIVE CARE**

Often the diagnosis of GERD is made by the history of symptoms and predisposing factors. Collaborative care focuses on lifestyle changes, diet modification, and for more severe cases, drug therapy. Surgery is reserved for clients who develop serious complications.

**Diagnostic Tests**

Diagnostic tests that may be ordered for clients with manifestations of GERD include:

- **Barium swallow** to evaluate the esophagus, stomach, and upper small intestine.
- **Upper endoscopy** to permit direct visualization of the esophagus. Tissue may be obtained for biopsy to establish the diagnosis and rule out malignancy. See page 000 for nursing care of the client undergoing an upper endoscopy.
- **24-hour ambulatory pH monitoring** may be performed to establish the diagnosis of GERD. For this test, a small tube with a pH electrode is inserted through the nose into the esophagus. The electrode is attached to a small box worn on the belt which records the data. The data are later analyzed by computer.
- **Esophageal manometry** measures pressures of the esophageal sphincters and esophageal peristalsis.

**Medications**

Antacids, such as Mylanta or Maalox, relieve mild or moderate symptoms by neutralizing stomach acid. Gaviscon, which forms a floating barrier between the gastric contents and the esophageal mucosa when the client is upright, may also be used.

Histamine₂-receptor (H₂-receptor) blockers reduce gastric acid production and are effective in treating GERD symptoms. When treating GERD, H₂-receptor blockers are usually given twice a day or more frequently for a prolonged period of time. Cimetidine, ranitidine, famotidine, and nizatidine are all approved by the FDA for the treatment of GERD and are available over the counter.

Omeprazole (Prilosec), lansoprazole (Prevacid), pantoprazole (Protonix), and rabeprazole (Aciphex) are proton-pump inhibitors (PPIs) that reduce gastric secretions. PPIs promote healing of erosive esophagitis as well as relieve symptoms. An 8-week course of treatment is initially prescribed, although some clients may require 3 to 6 months of therapy.

A promotility agent, such as metoclopramide (Reglan), may be ordered to enhance esophageal clearance and gastric empty-