This chapter describes the indications, patient preparation, equipment, procedure technique, interpretation, and reporting of the results of esophageal manometry—the main procedure performed in GI motility laboratories.

**ESOPHAGEAL PHYSIOLOGY**

The 2 primary functions of the esophagus are to transport swallowed materials from the pharynx to the stomach and to prevent reflux of injurious gastric contents into the esophagus. The motor activities that allow the esophagus to accomplish these tasks are regulated by 3 physiological areas: the upper esophageal sphincter (UES), the body of the esophagus, and the lower esophageal sphincter (LES).

**ESOPHAGEAL SYMPTOMS**

Specific symptoms that generally indicate esophageal origin include the following:

- Heartburn, a characteristic symptom of gastroesophageal reflux disease (GERD) that is often described as a burning sensation in the retrosternal area
- Regurgitation, another characteristic symptom of GERD and often described as reflux of gastric contents into the mouth, sometimes when bending over or lying down
- Dysphagia or difficulty in swallowing
- Odynophagia or pain on swallowing

Several nonspecific symptoms include:

- Globus, a sensation of a lump or foreign body in the throat
- Chest pain
- Rumination
- Belching