Esophageal Strictures and Webs

Causes

Esophageal stricture refers to narrowing or tightness within the esophagus (the tube that helps carry food from the throat into the stomach) causing a decrease in its luminal diameter. The narrowing can be caused both by benign and malignant conditions, with benign being the most common.

The most common benign type of stricture is called a peptic stricture, and it is due to reflux (heartburn) related inflammation of the lower esophagus. Stomach acid can potentially cause irritation of the lower esophagus and eventually lead to scarring and narrowing. Other common types of benign esophageal strictures include esophageal webs or rings, which are thin scar bands within the lumen of the esophagus. Webs are commonly seen in the upper part of the esophagus and rings (Schatzki ring being the most common) are commonly seen in the lower portion of the esophagus.

Symptoms, Signs and Diagnosis

Although, most patients with esophageal webs and rings are asymptomatic, difficulty swallowing solid food is the main presenting symptom in both benign and malignant symptomatic strictures. Swallowing difficulties are long-standing and can progress slowly. Sudden onset of difficulty swallowing can sometimes occur in patients with esophageal rings after eating a large bite of food. Other symptoms may include chest pain and/or weight loss.

Diagnosis of esophageal strictures is made by utilizing one or more of the following studies.

- Barium esophagram – This study is performed by radiology, and it provides a set of x-rays to evaluate the esophagus after swallowing barium, which is a chalky substance. The x-rays are typically taken in different positions.

- Esophagoscopy – This endoscopic procedure can be performed under anesthesia using an endoscope inserted through the mouth to evaluate the esophagus. It can also be performed in the office using a thin endoscope passed through the nose (Trans-nasal Esophagoscopy, or TNE). Both procedures allow for direct visualization as well as tissue biopsy if needed.

Treatment

In symptomatic patients, dilation (stretching of the narrowed esophageal segment) is the main treatment, especially in benign conditions. Different methods and instruments can be used for dilation.