Cricopharyngeal Dysfunction

Background

The esophagus has two muscular sphincters that allow the passage of food and liquid from the throat to the esophagus and then into the stomach. These include the upper and lower esophageal sphincters. The upper esophageal sphincter is located at the top of the esophagus and is mainly made up of the cricopharyngeus muscle (CP). This muscle is normally closed and relaxes when food or liquid pass into the esophagus. This closed state also prevents the reflux of food into the throat. Cricopharyngeal dysfunction occurs when the cricopharyngeus muscle has difficulty relaxing and this causes problems with swallowing. It is most commonly seen in the elderly.

Symptoms, Signs, and Diagnosis

Dysfunction of the cricopharyngeus (CP) muscle occurs gradually, thus symptoms progress from mild to severe. Patients first present with difficulty in swallowing pills, followed by solids and then eventually liquids. A special x-ray study called “fluoroscopy” which watches you swallow barium will show cricopharyngeal dysfunction. Solid or liquid materials are seen in the throat after a swallow due to the difficulty in passing through the upper esophageal sphincter. A test called esophageal manometry can also be performed and this measures the muscle contraction and coordination that occurs when swallowing.

Treatment

There are several options for treatment of cricopharyngeal dysfunction. Botox can be injected into the muscle to help it relax. This will allow better passage of food from the throat to the esophagus. This treatment is and has to be repeated every 3-6 months. The cricopharyngeus muscle can be dilated and this is generally done after a Botox injection in the operating room. Cricopharyngeal myotomy is a surgery that can be performed through the mouth or through an incision in the neck. The cricopharyngeal muscle is cut and the sphincter released. The results after this surgery are immediate, especially for patients with severe dysfunction.