Surgery for Upper Esophageal Sphincter

Food passes from your mouth to the back of your throat where your muscles squeeze it through the upper esophageal sphincter (UES). The UES is a narrowing that opens and closes to allow food to pass through from throat to esophagus and prevents regurgitation of food or gas from esophagus to throat. The food then passes into the esophagus and down to the stomach. Problems with the UES can present as trouble swallowing, feeling a sensation of food sticking in your throat, regurgitation, cough, weight loss, voice changes and globus sensation (the sensation that something is stuck in the throat). The reason for these sensations is due to the inability of this sphincter muscle to relax. When this sphincter is not opening properly, there are several options for treatment, including injection of Botox to decrease tension of this muscle, dilation or stretching of the muscle with a bougie or a balloon, or cutting the muscle to weaken it endoscopically with a laser or via the neck through an incision in the neck.

**Dilation**

Dilation can be done under both local anesthesia and general anesthesia. Local anesthesia dilation is done with a flexible scope and a balloon that passes through the nose and is most tolerated in patients who had radiation therapy in the past. Under general anesthesia, dilation can be done through the mouth with a variety of instruments. Contraindication is limitation in the mouth opening or access to the esophagus due to prior spine or neck surgery. Post-operative recovery will include a sore throat. The most feared complication is creating a false tract or causing a tear in the esophagus. Additionally, the procedure is temporary and repeat dilations may be required.

**Botox**

Botox can be injected into the sphincter and cause weakness of the muscle to decrease the sphincter tone. This also can be done awake or under general anesthesia. The procedure is temporary and requires repeat injections every 3 to 6 months. The most feared complication of this procedure is worsening swallowing difficulty after the injection due to spread of Botox to the muscles in the throat that help push the food bolus along. Weakening of supporting muscles may also lead to aspiration, or food going down the windpipe into the lungs.

**Myotomy**

During a myotomy, cut is made through the UES muscle to weaken the muscle. This is a permanent procedure. The procedure is done under general anesthesia either through the mouth endoscopically or through the neck skin externally. When performed endoscopically, the procedure requires an overnight admission to monitor for any complications. Contraindication is limitation in the mouth opening and access to upper esophagus from prior spine or neck surgery. An external procedure requires an incision through your neck and approaching the muscle from the outside. This also requires overnight admission. Postoperative recovery will include pain and a graduated transition from a liquid to a solid diet.