

Nissen fundoplication: A surgical procedure to treat gastroesophageal reflux disease (GERD) and hiatal hernia.

Nissen fundoplication is an excellent option for a carefully selected group of patients. Appropriate candidates typically report approximately 85 to 90 percent satisfaction (meaning they would choose to have surgery again) at 5 and 10 years respectively. The procedure does require pre-operative testing. It may require post-operative lifestyle changes and side effects. However it is considered the ideal option in many patients who are no longer finding relief with medications or those who do not wish lifelong exposure to acid suppressive therapy.

THE PROCEDURE This is usually performed for patients when previously useful medical therapy has failed. Patients typically describe breakthrough symptoms that used to be controlled by medication. In a fundoplication, the gastric fundus (upper part) of the stomach is wrapped, or plicated, around the lower end of the esophagus and stitched in place. This reinforces the valve function of esophagus. The diaphragm muscles are also approximated to prevent hernia formation. This can typically be performed robotically to minimize recovery time.

CANDIDATES Multiple tests are typically required to identify the best surgical candidates. The goal of testing is to ensure that reflux exists and the esophagus functions correctly. Upper endoscopy (EGD) is performed to diagnose reflux and rule out other problems. Occasionally pH testing (Bravo) may be ordered to characterize and quantify pathologic reflux. An esophagram is a dye test that ensures adequate swallowing mechanism. Manometry tests pressure and peristalsis. It is often ordered to ensure esophageal function is normal. Your physician may order all or a combination of these tests prior to offering surgery.

RISKS Multiple complications are possible, although rare after Nissen fundoplication. Bleeding, infections, and bowel injuries may occur during any major abdominal operation. Slippage or breakdown of the wrap may occur which will result in recurrence of symptoms. The problems are uncommon but important to consider.

WHAT TO EXPECT POST-OP Most symptoms patients experience post operatively are a side effect of the wrap. The most common is dysphagia, which means difficulty in swallowing. All patients experience some degree of dysphagia after surgery secondary to swelling of the lower esophagus. A liquid diet is recommended for all patients for a minimum of two weeks after surgery. Studies vary widely, but it is not uncommon for patients to experience some degree of swallowing problems up to 3 to 6 months after surgery. Although relatively uncommon some patients require endoscopic dilation of their wrap if too tight. Revision surgery is possible to address persistent or significant swallowing problems but this is rare.

COMMON SIDE EFFECTS Increase in flatulence, bloating, and inability or decreased ability to vomit or belch. All of these symptoms are due to the wrap preventing reflux of air out of the stomach. Carbonated beverages may be especially bothersome. Studies vary but the majority of patients report some degree of these side effects in both the short and long term. Dietary changes, medications, and occasionally speech therapy may be required.