

Minimally Invasive Surgery

By Rudolph Kluiber, M.D.
Colon & Rectal Surgery

The past several years have seen an explosion in what's called "minimally invasive" surgery or laparoscopic surgery. Laparoscopy comes from two Greek words. The first is lapara, which means "the soft parts of the body between the rib margins and hips." The second word, skopein, means "to see or view or examine." Skopein has become "scope" in English, such as in microscope, stethoscope and now laparoscope.

Minimally invasive surgery is a technique which uses specialized instruments designed to fit into the body through several tiny incisions instead of one large incision typical with traditional surgery. Instead of being able to view the procedure directly, the surgeon monitors the procedure via a special video camera called a laparoscope that's inserted through one of the small incisions. By eliminating the large incision and extensive dissections required with traditional surgery, much of the pain of recovery can also be eliminated. In addition, hospital stays are reduced and recovery times are much quicker than with traditional surgery. One of the most common laparoscopic surgeries performed is for hernia repair. Another laparoscopic surgery is for treatment of severe heartburn known as gastroesophageal reflux disease (GERD).

Hernia Repair

Each year, over 500,000 men and women undergo surgery to repair abdominal hernias. A hernia occurs when a hole in the muscular wall of the abdomen forms and allows abdominal contents such as the intestines to protrude into the space under the skin. Small hernias may actually go unnoticed. However, hernias can, and usually do, gradually enlarge so that more and more contents spill out creating a larger bulge and more discomfort under the skin.



Rudolph Kluiber, M.D.

Traditionally, hernias have been repaired by making an incision directly over the area of the hernia, dissecting the tissue around the hernia, pushing the contents back into the abdomen and repairing the defect with a mesh. A mesh looks like a screen that one would find on a window; however, it is made of a synthetic fabric that is quite soft. This gives the abdominal wall the strength which was lacking. While this is a very good operation and has had a good

success rate over the years, the downside of this type of operation, especially in groin hernias, is that it's usually associated with a fair amount of swelling and pain. In fact, often the pain may be so intense that the patient is unable to urinate. In addition, the patient usually needs to stay home from work for approximately two weeks and avoid heavy lifting or straining for six weeks until the swelling subsides and the repair strengthens.

With laparoscopic surgery, there are only a few small incisions made and the mesh is installed against the abdominal wall on the inside of the abdomen rather than on the outside. This technique is conceptually very similar to the traditional repair; however, due to the fact that only a few small "ports" are used, the amount of swelling and pain experienced during recovery is significantly reduced. After this type of surgery, most people can go back to work within a week and more strenuous activity, including heavy lifting and straining, can be resumed within two or three weeks.

Treatment for Heartburn

Severe heartburn, also known as gastroesophageal reflux disease (GERD), is a pain in the upper abdomen or chest which may cause permanent damage to the esophagus. Other associated problems include regurgitation

(Continued)

Minimally Invasive Surgery

continued...

of acidic gastric contents, stricturing (narrowing) of the esophagus, chronic cough and even the development of cancer of the esophagus. The cause of GERD is a faulty valve mechanism located between the lower part of the esophagus and the top of the stomach. This muscular valve, or sphincter, fails to close properly after swallowing, thereby allowing acid from the stomach to move up into the esophagus causing heartburn. An estimated 20 to 30 million Americans suffer from this disease.

Current treatment includes medications to decrease the acid secretion in the stomach and measures to reduce the reflux such as elevating the head of one's bed and sleeping on many pillows. For severe cases or if such treatments are not successful, surgery may be recommended.

The most common surgery for repairing this problem is called the Nissen Fundoplication. During the Nissen Fundoplication, the stomach is wrapped around the esophagus to create a new valve. It can be performed in the traditional "open" way or, more recently, using laparoscopic techniques. Both options are equally successful in relieving the symptoms with up to 90 percent reporting success.

There are important differences between the two operations that should be taken into consideration. Traditional surgery results in a hospital stay of several days while the minimally invasive procedure requires only about one to two days in the hospital. In addition, overall recovery time has been significantly reduced to approximately one to two weeks versus a month or more for traditional surgery, and there's a dramatic decrease in post-operative pain.

Today, the use of laparoscopy has been extended to include surgeries involving the appendix, colon, uterus, repair of hiatal hernias and more. What began as a procedure used for diagnosis has developed into "minimally invasive" surgery that greatly reduces hospital stays, time away from work and post-operative pain.

For more information call Advanced HealthLine at (262) 512-2880 or toll-free at 1-888-709-2080 outside the Milwaukee metro area, or log on at www.ah.com.

Rudolph M. Klueber, M.D., is a Colon and Rectal Surgeon with Aurora Advanced Healthcare's East Mequon Clinic (12203 North Corporate Parkway, Mequon, 262-387-8200) and Good Hope Clinic (3003 West Good Hope Road, Milwaukee, 414-352-3100).