

Laparoscopic Surgery - What Is It?

What is laparoscopic surgery?

Laparoscopic or “minimally invasive” surgery is a specialized technique for performing surgery. In the past, this technique was commonly used for gynecologic surgery and for gall bladder surgery. Over the last 10 years the use of this technique has expanded into intestinal surgery. In traditional “open” surgery the surgeon uses a single incision to enter into the abdomen. Laparoscopic surgery uses several 0.5-1cm incisions. Each incision is called a “port.” At each port a tubular instrument known as a trochar is inserted. Specialized instruments and a special camera known as a laparoscope are passed through the trochars during the procedure. At the beginning of the procedure, the abdomen is inflated with carbon dioxide gas to provide a working and viewing space for the surgeon. The laparoscope transmits images from the abdominal cavity to high-resolution video monitors in the operating room. During the operation the surgeon watches detailed images of the abdomen on the monitor. This system allows the surgeon to perform the same operations as traditional surgery but with smaller incisions.

In certain situations a surgeon may choose to use a special type of port that is large enough to insert a hand. When a hand port is used the surgical technique is called “hand assisted” laparoscopy. The incision required for the hand port is larger than the other laparoscopic incisions, but is usually smaller than the incision required for traditional surgery.

What are the advantages of laparoscopic surgery?

Compared to traditional open surgery, patients often experience less pain, a shorter recovery, and less scarring with laparoscopic surgery.

What kinds of operations can be performed using laparoscopic surgery?

Most intestinal surgeries can be performed using the laparoscopic technique. These include surgery for Crohn’s disease, ulcerative colitis, diverticulitis, cancer, rectal prolapse and severe constipation.

In the past there had been concern raised about the safety of laparoscopic surgery for cancer operations. Recently several studies involving hundreds of patients have shown that laparoscopic surgery is safe for certain colorectal cancers.

How safe is laparoscopic surgery?

Laparoscopic surgery is as safe as traditional open surgery. At the beginning of a laparoscopic operation the laparoscope is inserted through a small incision near the belly button (umbilicus). The surgeon initially inspects the abdomen to determine whether laparoscopic surgery may be safely performed. If there is a large amount of inflammation or if the surgeon encounters other factors that prevent a clear view of the structures the surgeon may need to make a larger incision in order to complete the operation safely.

Any intestinal surgery is associated with certain risks such as complications related anesthesia and bleeding or infectious complications. The risk of any operation is determined in part by the nature of the specific operation. An individual’s general health and other medical conditions are also factors that affect the risk of any operation. You should discuss with your surgeon your individual risk for any operation.

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