

Minimally Invasive Abdominal Surgery

Laparoscopic, or “keyhole” surgery, for problems in the abdomen means smaller incisions, less trauma, and faster recovery time.

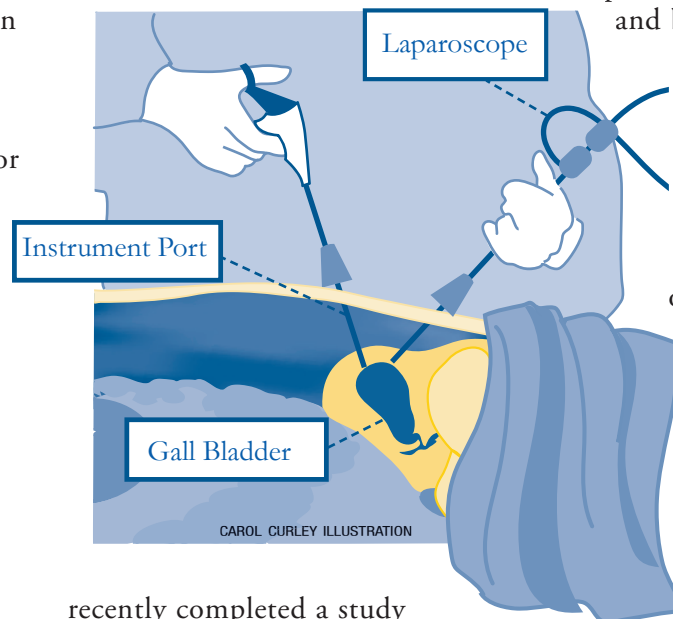
While surgery is meant to solve a health or quality of life problem, it’s hard on even the most fit patients: the long incisions of traditional surgery traumatize skin and muscles, making recovery a long and painful process. But more and more doctors are performing minimally invasive, or “keyhole” surgery, that heals more quickly, requires a shorter hospital stay and less pain medication, and therefore costs less and gets you back on your feet more quickly.

Used commonly in the U.S. for about 10 years, the safety of abdominal keyhole (or laparoscopic) surgeries for older adults has been debated, but new studies show that older patients definitely benefit from its faster recovery times. Most commonly used for gall bladder operations, laparoscopic surgery can also be used for operations to nearly any abdominal organ, to repair hernias, for hysterectomies and other gynecological procedures, gastric bypass surgery, appendectomies, intestinal and bowel surgeries, to remove kidneys in living donor operations, and as a diagnostic tool so that a doctor can see the abdomen’s interior better than with X-rays or scanners. Though not yet widely done, laparoscopic prostate surgery is slowly gaining popularity as doctors become more schooled in the procedure.

“The conventional thinking was that we shouldn’t be using laparoscopic approaches on older, more frail patients, because it takes too long, and we don’t want

to subject them to increased anesthesia time,” says Erik Dutson, MD, assistant clinical professor of surgery at the UCLA Minimally Invasive Surgery Program, “but that’s really not what we found when we objectively studied how the patients do after laparoscopic surgery.”

Dr. Dutson and colleagues



recently completed a study that found that laparoscopic surgery is safe for patients over 75. Other recent studies have demonstrated the technique’s safety for older patients undergoing gallbladder, appendix, and kidney donor operations, in particular.

How it works

Laparoscopic surgery is performed under general anesthesia. An incision less than an inch long is made near the belly button, and the abdomen is inflated with carbon dioxide gas so the surgeon has room to work. A port is then placed in the incision, and a tiny

video camera called a laparoscope is inserted into the abdomen.

Additional small incisions are made and ports inserted for each surgical instrument, which can be used to cut, cauterize, clamp, remove, or staple.

The surgeon watches the procedure on television-like monitors. When the procedure is complete, each incision is closed with a few stitches and a small bandage. The remaining carbon dioxide gas puts pressure on the diaphragm

and bladder, causing shoulder pain and an urge to urinate, but this will pass within 48 hours. Patients are usually sent home the day after surgery.

The small incisions of laparoscopic surgery mean less trauma to skin and muscle, so less pain. Less pain means both a quicker return to normal activity and less medication. Along with a shorter hospital stay, this results in reduced costs.

Most important, according to Dr. Dutson, the quicker return to normal activities like sitting up, walking, and breathing deeply helps to keep patients’ lungs clear of fluid, which is particularly important for older patients. After traditional surgeries with large incisions, “patients have a sore abdomen. They don’t want take a deep breath and cough after the surgery, because it hurts. This means they don’t move a lot of air through their lungs. Then the lungs tend to collect fluid, the fluid captures bacteria, and they

get pneumonia. So the improved pulmonary function after a minimally invasive operation really makes a difference.”

See “Better Breathing” on page three for information on how to keep your lungs in good condition.

Things to consider

Because inflation with gas is painful to the very sensitive abdominal lining, general anesthesia—which carries some risk—is required for laparoscopic surgery, so it must be as carefully considered as any major surgery. This also means that if you have a condition that makes it dangerous for you to undergo general anesthesia, such as advanced heart or lung disease, laparoscopic surgery is not for you. Your doctor will suggest that you have a traditional operation with a less-risky kind of anesthesia. If you have a lot of scar tissue from previous surgeries, the surgeon may not be able to inflate your abdomen properly or insert the camera or instruments, and will suggest a traditional operation instead. If you are on blood thinning medications like Coumadin or Plavix and cannot stop taking them without risking your health, your doctor may decide that any surgery is too dangerous.

One concern about any surgery, especially for older people, is the amount of time that must be spent under general anesthesia. When laparoscopy was a new procedure, it often took longer than traditional surgery for a comparable operation; thus patients had to remain unconscious longer. This is not generally the case any longer, according to Dr. Dutson. “The surgeons themselves have a lot more experience, and we actually have young generations of surgeons who have been exposed to ‘lap’ surgery very early in their

training. Consequently, many types of operations can be done as fast or faster with a laparoscopic approach, with less physiologic insult to the patient.”

If laparoscopic surgery is a good option for you, tell your doctor all the medications that you take, including non-prescription drugs like aspirin, vitamins, and herbal supplements. These may affect the way your blood clots. Your doctor will tell you to stop taking some of your medications or supplements a few weeks before surgery, but you can resume taking them afterwards. Depending on the particular kind of surgery, you may need to prepare in other ways, such as following a clear liquid diet in the days before surgery to clear the intestines. As with all surgeries, you shouldn’t have food or water in the eight hours before the operation.

It’s very important that you closely follow the recovery pace set for you by your doctor, as you return to your normal routine after laparoscopic surgery—just as you would with conventional surgery. “Patients have to remember that even if they have small incisions, sometimes they’ve still had a very big operation, so the time that it takes for the inside to heal is no different,” says Dr. Dutson.

There will be a balance between doing too much and doing too little. Pushing yourself to breathe deeply after surgery may speed your recovery, but pushing too hard, too soon, on the exercise front will set you back. Follow your doctor’s instructions to the letter.

There are some abdominal fix-it procedures that are still best done via quick, open surgery with the patient under a local anesthetic—simple hernia operations, for example, in which time spent under general anesthesia isn’t war-

WHAT YOU CAN DO

Preparing for laparoscopic surgery:

- Discuss your health history, medications, and vitamin and herbal supplements with your doctor.
- Follow your doctor’s instructions about stopping medications and supplements.
- Follow your doctor’s instructions regarding diet restrictions.
- Arrange for help at home for a few days after your surgery.

During recovery:

- Follow your doctor’s instructions regarding diet restrictions and wound care.
- Take full breaths to help keep your lungs clear, even if deep breathing is uncomfortable at first.
- Go slowly; don’t overdo it. Your insides need time to heal.
- Be sure to keep your follow-up appointment with your doctor.



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For many abdominal procedures, however, it’s clear that a minimally invasive laparoscopic approach benefits older patients.

Dr. Dutson suggests that when facing any kind of surgery, “always ask if it can be done laparoscopically, or if the doctor feels comfortable referring you to someone.”

Look for a surgery center that does a large number of laparoscopic procedures, and a surgeon with lots of experience with the technique. ■