LAPAROSCOPIC COLORECTAL SURGERY

PATIENTS SHOULD CHOOSE LAPAROSCOPIC OR MINIMALLY-INVASIVE SURGERY BECAUSE THEY OFTEN experience less pain, have a shorter hospital stay, have a shorter recovery time for returning to normal activities and there is less scarring. There is also a lower chance of wound infection with laparoscopic surgery.

Most kinds of intestinal surgery can be performed using the laparoscopic approach. In colorectal-cancer surgery, laparoscopic surgery is currently limited to patients with early-stage cancer. Laparoscopic surgery is not suitable in cases where the cancer is very advanced or has already invaded another adjacent organ. Laparoscopic surgery may also not be suitable in patients who have previously undergone a major operation in the abdomen via a long mid-line incision. However, the surgeon will definitely need to review each patient's clinical situation on a case-by-case basis. Laparoscopic surgery is also not suitable for patients with severe cardiac or lung disease.

Laparoscopic or minimally-invasive surgery is a specialised technique for performing surgery. In laparoscopic surgery, the same operation is performed as in traditional surgery but with only a few small incisions in the abdomen of around 0.5 to 1cm. Standard abdominal operations usually require a very long mid-line incision in the abdomen.

In laparoscopic surgery, a camera telescope is inserted near the belly button, and transmits images to high-resolution video monitors in the operating room. The surgery is performed internally using long and fine instruments.

Patients with cardiac history or lung diseases need to be assessed by the respective specialists before surgery, to ensure that they are suitable for laparoscopic surgery. Certain medications such as aspirin or warfarin or blood-thinning tablets will need to be discontinued temporarily, under advise, before laparoscopic surgery.

After operating, I would usually encourage my patients to cooperate with the physiotherapist to do deep breathing exercises and have chest physiotherapy. Patients will also be advised to do lower-limb exercises and to start walking as soon as possible. This physical therapy will reduce the chance of chest infection, poor circulation in the legs or the development of blood clots. This is an important area where patients can actively participate and assist in their own recovery.

Most intestinal surgery may be performed using the laparoscopic approach, including surgery for appendicitis, gall bladder disease, hernia, inflammatory bowel disease and colorectal cancer. Conversely, laparoscopic surgery is not suitable in colorectal-cancer cases where the cancer is very advanced or has already invaded another adjacent organ. Patients who have already developed an intestinal obstruction due to cancer would also normally be unsuitable for laparoscopic surgery. However, presently a colonic stenting procedure is available and an obstructed patient may have the cancer stented to allow decompression of their colon. Thereafter, the laparoscopic approach may be possible to remove the cancer.

Laparoscopic instruments and technologies are advancing rapidly. Surgeons are also upgrading and improving their skills constantly; what was once not possible may become possible or routine in the future.

Traditionally, surgeons' training was apprenticeship-based. We learned by assisting experienced surgeons on simple operations first, before moving on to advanced operations and laparoscopic surgery. A laparoscopic surgeon needs to trained in the standard approach before attempting training in laparoscopic surgery. Nowadays, simulation training is available. There are computer simulators much like computer simulation training for aircraft pilots. This has greatly enhanced the laparoscopic and endoscopic skills of surgeons with absolutely no risk to actual patients during the training process. I have a keen interest in this field, and have conducted numerous simulation training courses for medical students and young surgeons. ■

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