Improved Surgical Outcomes of Laparoscopic Gastrectomy Compared with Conventional Open Gastrectomy for Gastric Adenocarcinoma in Obese Patients

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Laparoscopic abdominal surgery including gastrectomy in obese patients is challenging. Obesity has been increasing and more and more patients we encounter in the surgical clinic are obese as well.¹

Although the incidence of gastric cancer has been on the decline, it is still one of most common cancers in Asian countries.² Minimally invasive surgery for gastric cancer is being practiced more often with the development of new instruments and improvement in devices. The short and long term results regarding the safety and efficacy of oncological outcomes of laparoscopic gastrectomy in early gastric cancer have already been established and are considered unequivocal.^{3,4} We are expecting such results in advanced gastric cancer.

Obese patients with gastric cancer have shown poor surgical outcomes in open and laparoscopic surgery compared with normal weight patients. A longer operation time, more intraoperative blood loss, and less lymph node retrievals were reported and more evident in cases of open surgery.⁵

A high level of surgical technique is required in every process in obese gastric cancer patients, from inserting the trocars, performing gastrectomy with adequate lymph node dissection and completing reconstruction. Excessive fat makes anatomical dissection difficult during omentectomy, lymph

node dissection around major vessels and in conducting a tension-free reconstruction.

Short term outcomes of laparoscopic surgery in obese patients such as operation time, open conversion rate, postoperative complications and mortality are concerning issues for the surgeon. Furthermore, long term results including cancer recurrence and incisional hernia are of interest.

In this article, the author divided the patients into two groups according to their BMI. However, the extent of visceral obesity could be of more importance in abdominal surgery because BMI may not accurately reflect the amount of intra-abdominal fat, which makes laparoscopic procedures more difficult.⁶ The results of this study might differ if data were reanalyzed according to visceral fat.

The patients in the open gastrectomy group had slightly larger tumors and had received more aggressive lymph node dissection than in the laparoscopic group even though all patients were diagnosed with early gastric cancer. This is one of the reasons why the laparoscopic group had more favorable results. Surprisingly, the operation time was shorter in the laparoscopic group, which was probably because of the well trained and highly qualified participating operators. This article helps readers consider the advantages of laparoscopic

gastrectomy over open gastrectomy performed by a skillful surgeon in obese patients.

Recently, totally laparoscopic gastrectomy (TLG) has been thought to have more advantages than laparoscopic-assisted gastrectomy (LAG) with respect to pain, scar and recovery time to daily life⁷ because TLG with intracorporeal anastomosis requires a smaller incision for specimen extraction alone, especially in obese patients. A similar study comparing LAG and TLG in obese gastric cancer patients would yield interesting results.

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