Reduced Port Laparoscopic Distal Gastrectomy with D2 Lymphadenectomy

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ABSTRACT

Background. Reduced port laparoscopic surgery (RPLS), as a more minimally invasive treatment alternative to conventional laparoscopic surgery (CLS), has been increasing in recent years.¹ With the accumulation of surgical experience and improvements in surgical techniques, the indication of RPLS has been gradually extended from benign diseases to malignant tumors, including gastric cancer.^{2–4} However, due to the lack of counteraction and triangulation, lymphadenectomy during reduced port laparoscopic gastrectomy (RPLG) for gastric cancer was considered challenging. In this study, we report our experience performing RPLG with D2 lymphadenectomy for distal gastric cancer.

Methods. A disposable, single-incision, multiport, laparoscopic surgery trocar was used through a 3-cm incision at the umbilicus for the laparoscopist and surgeon's right hand. One 12-mm trocar was inserted at the upper-right quadrant for the surgeon's left hand. Distal gastrectomy with D2 lymphadenectomy was performed in the same manner with CLS.⁵ After extracting the resected specimen through the umbilicus incision, intracorporeal

Roux-en-Y or B-II gastrojejunostomy was used for reconstruction.

Results. RPLG with D2 lymphadenectomy was performed on five patients from April 2017 to June 2017. No intra-operative event requiring conversion to CLS or open surgery occurred. No postoperative complication was observed. The median operating time and blood loss was 166 min and 50 ml. The mean number of retrieved lymph nodes was 32.7. Postoperatively, the mean time to first flatus, soft intake, and hospital stay was 2.6, 3.5, and 6.7 days respectively.

Conclusions. RPLG with D2 lymphadenectomy might be safe and feasible in selected patients.

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