

Total mesorectal excision for rectal cancer: laparoscopic versus open approach

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ABSTRACT

Aims and background. To evaluate the oncologic safety of laparoscopic total mesorectal excision for rectal cancer.

Methods and study design. Patients who underwent laparoscopic (n = 256) or open (n = 173) total mesorectal excision for rectal cancer between June 2005 and June 2011 were included. Long-term survival operative data and postoperative recovery were retrospectively reviewed from a prospectively collected database.

Results. No significant difference was found between the two groups in terms of age, sex, tumor stage and preoperative comorbidities. Twelve patients were converted to open procedures. Differences were found in blood loss (55 ± 14.1 vs 152 ± 29.2 ml $P < 0.05$), infection of incision (3.1% vs 12.7%, $P < 0.05$) and postoperative stay (8.1 ± 3.0 vs 12.4 ± 6.3 days, $P < 0.05$). Both groups were comparable regarding lymph node clearance specimen length and distal margin. There was no significant difference in overall survival between the two groups by the life-table method. However, operative time in the laparoscopic group was longer than in the open group (168 ± 27.6 vs 141 ± 21.9 min, $P < 0.05$).

Conclusions. Laparoscopic total mesorectal excision for rectal cancer offers oncologic results similar to those obtained with the open procedure with a favorable short-term outcome. Continued use of the procedure in these patients is supported.

Key words: minimal invasive surgery, rectal cancer, total mesorectal excision.

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