

Do laparoscopic colectomy techniques compromise oncologic principles?

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Abstract

Background: Benefits of laparoscopic techniques over traditional open techniques in colon surgery are well recognized. Although both hand-assisted laparoscopic colectomy (HALC) and laparoscopic-assisted colectomy (LAC) can be effective in the treatment of colon cancer, the superiority of either technique has yet to be determined for oncologic procedures.

Materials and Methods: A five-year retrospective study comparing outcomes of hand-assisted laparoscopic and laparoscopic-assisted colectomies for cancer was conducted at our community-based teaching hospital. Demographic data, tumor location and stage of the disease were analyzed. Outcomes compared between the two procedures included number of lymph nodes retrieved, presence of positive margins, operative time, length of stay, and number of early postoperative complications.

Results: Fifty patients underwent HALC, while 23 underwent LAC during the study period. Demographic data were similar between the two groups. Operative time was longer for LAC, compared with HALC (178 vs. 125 min., $p < 0.05$), however, the average number of lymph nodes retrieved was significantly higher in LAC compared with HALC (14 vs. 10, $p < 0.05$). No significant differences were recorded for positive margins, postoperative complications, or the length of hospital stay.

Conclusions: While HALC was more prevalent at our institution and proved to be associated with decreased operative times, the number of lymph nodes retrieved was sub-optimal and compared less favorably with LAC. Above all, oncologic principles should be respected and achieved regardless of the operative technique used.

Key-words: hand-assisted laparoscopic colectomy, laparoscopic-assisted colectomy, HALC, LAC

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