

## Favorable outcomes with laparoscopic surgery for rectal cancer

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Liakakos et al. [1] concluded from a retrospective series of 1,057 selected patients studied by Miyajima et al. [2] that laparoscopic surgery for rectal cancer is safe. Although cohort studies have shown safety, the most important outcomes such as disease-free survival and the recurrence rate need to be demonstrated in prospective randomized controlled trials before laparoscopic surgery is accepted as the standard approach.

Laparoscopic resection of colonic cancer is proved to be safe, with no difference in long-term oncologic outcome compared with open surgery [3–5]. However, long-term outcome data after laparoscopic surgery for rectal cancer still are not available.

Only 5 years ago, the first study investigating the quality of the mesorectal dissection with 25 patients was published [6]. The first randomization was done in the conventional versus laparoscopically-assisted surgery in Colorectal Cancer (CLASICC) trial with 253 patients treated with laparoscopic surgery. The conversion rate at the beginning of the trial was 34%, which decreased to 16% during the sixth year of the study [5]. This high conversion rate in a relatively small study group was due the experience curve effect.

Miyajima et al. [2] concluded that laparoscopy is feasible and safe for selected patients with rectal cancer, with favorable short- and mid-term outcomes after a mean follow-up period of 30 months. This retrospective study, not intended to be a comparison between open and laparoscopic surgery, was reported without long-term outcome

data. Therefore, as stated by Liakakos et al. [1], more data are needed from randomized controlled trials, if feasible, to support the hypothesis of better oncologic outcomes for closed rather than open surgery for rectal cancer.

Currently, several multicenter randomized controlled trials comparing laparoscopic and open surgery for rectal cancer are registered (Clinicaltrials.gov) and recruiting patients, including the laparoscopic-assisted resection or open resection in treating patients with Stage IIA, Stage IIIA, or Stage IIIB rectal cancer (NCT00726622) trial by the American College of Surgeons (estimated primary completion date, August 2010) and the Phase II trial to evaluate laparoscopic surgery for Stage 0/I rectal carcinoma (Lap RC), NCT00635466 (estimated study completion date, 2016).

In addition, the comparing laparoscopic and open surgery for rectal cancer (COLOR II) trial (NCT00297791) will fulfil the profound need for a well-designed and performed randomized trial. Recently, this COLOR II trial finished randomization of 1,100 patients. The short-term results will be presented by the colorectal cancer laparoscopic or open resection study group on a short notice.

The primary end point of the COLOR II trial is the locoregional recurrence rate 3 years postoperatively. Until these data become available, we believe that open total mesorectal excision must be regarded as the gold standard treatment for rectal cancer.

**Disclosures** M. H. G. M. van der Pas, E. A. te Velde, M. A. Cuesta, and H. J. Bonjer have no conflicts of interest or financial ties to disclose.

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