RECTAL CANCER WHAT SURGERY IS BEST?

Comparable rates of locoregional recurrence, disease-free and overall survival using either laparoscopic or open surgery for the treatment of patients with rectal cancer has been demonstrated in a new study published in *The New England Journal of Medicine*.

Good-quality evidence that laparoscopic and open surgery have similar outcomes for the treatment of patients with rectal cancer is lacking. The COLOR II randomized controlled trial was set up to assess whether laparoscopy was comparable or superior to conventional surgery. According to corresponding author Jaap Bonjer, “the hypothesis ... was that patients would experience less pain and recover more quickly after laparoscopic surgery [compared with conventional open surgery] due to use of small incisions and less traumatic surgery”.

In total, 1,044 patients with a single rectal adenocarcinoma were assigned to either laparoscopic ($n=699$) or open surgery ($n=345$). No difference in adverse events between groups was observed immediately after surgery. The primary end point was recurrence and the secondary end points were disease-free and overall survival at 3 years. Locoregional recurrence was 5% in both groups, suggesting that the laparoscopic approach is not inferior to open surgery. At 3 years, disease-free survival was 74.8% and 70.8%, and overall survival was 86.7% and 83.6% in the laparoscopic and open surgery groups, respectively.

“We advocate laparoscopic surgery in patients with rectal cancer, which has not invaded adjacent organs such as the urinary bladder and the uterus considering the short-term benefits to the patient such as less postoperative pain and faster recovery,” says Bonjer. However, a potential drawback to using a minimally invasive approach is the enhanced surgical expertise required. In addition, the authors write that patients with T4 or T3 lesions within 2 mm of the endopelvic fascia might not be eligible for laparoscopy because complete resection is difficult.

“A new surgical technique, the Transanal Total Mesorectal Excision (TaTME), which potentially improves radical resection of cancers in the lower 10 cm of the rectum will be evaluated in the COLOR III trial,” concludes Bonjer.

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Original article Bonjer, H. J. *et al.* A randomized trial of laparoscopic versus open surgery for rectal cancer. *N. Engl. J. Med.* **372**, 1324–1332 (2015)