SURGERY

Rectal cancer—treatment on the less invasive side

The long-term outcome of laparoscopic versus open surgery was assessed in patients with rectal cancer in a retrospective study by Laurent and colleagues. Although laparoscopic surgery has been reported to have similar efficacy to open surgery and has resulted in equivalent 5-year survival in patients with colon cancer, the outcomes of laparoscopic surgery in patients with rectal cancer have not been clearly defined. “[To] our knowledge, this is the first unicentric comparative series including more than 400 curative rectal excisions with 5 years’ results”, state the researchers.

Laurent and colleagues assessed data from 471 patients with rectal cancer who had undergone laparoscopy ($n = 238$) or open surgery ($n = 233$). Patients’ characteristics, such as age, sex, BMI, tumor stage, postoperative chemotherapy and protective ileostomy, were similar in both groups. Assessments included physical examination, colonoscopy with

biopsy, endorectal ultrasonography, abdominal and pelvic CT scan and MRI. Patients with stage T3, T4 or lymph-node-positive disease were treated with preoperative radiotherapy. Patients with stage T3 and lymph-node-positive disease received postoperative adjuvant chemotherapy following surgery (both laparoscopic and open).

“...laparoscopic surgery should be considered as an option for patients with rectal cancer...”

The researchers reported that prospective mortality, morbidity and quality of surgery outcomes were similar in both groups. At 5 years, local recurrence rates were 3.9% and 5.5% in patients treated with laparoscopic surgery and open surgery, respectively.

The 5-year disease-free survival was similar in both groups (82% and 79% for laparoscopic and open surgery, respectively). Interestingly, the 5-year overall survival was better for patients with stage T3 disease who were treated with laparoscopic surgery rather than open surgery (83% versus 72%). Patients’ outcomes were not influenced by the type of surgery and conversion had no negative impact on postoperative mortality, local recurrence and survival.

Based on these results, Laurent and coauthors conclude that laparoscopic surgery should be considered as an option for patients with rectal cancer as it is less invasive than open surgery, yet offers similar long-term local control and disease-free survival.

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Original article Laurent, C. et al. Laparoscopic versus open surgery for rectal cancer. *Ann. Surg.* 250, 54–61 (2009).