SURGICAL ONCOLOGY

Laparoscopic rectal cancer surgery is safe and effective

Image provided by J. H. Oh

Currently, there is no level I evidence for laparoscopic resection in the treatment of rectal cancer, although subset analyses of one randomized trial have shown short-term benefits for laparoscopic surgery. Laparoscopic procedures for rectal cancer are technically challenging because of the requirement of nerve preservation. No randomized clinical trials have demonstrated that laparoscopic surgery is safe after preoperative chemoradiotherapy for rectal cancer. In the COREAN trial, Kang and coauthors have now shown that laparoscopic surgery after preoperative chemoradiotherapy for mid or low rectal cancers is safe and has short-term benefits compared with open surgery.

“The COREAN trial shows that laparoscopic surgery is feasible and does not increase short-term oncological risks...after preoperative chemoradiotherapy for mid or low rectal cancers,” explains Kang’s team. In

this randomized, controlled, open-label parallel group study, 340 patients were randomly assigned to either laparoscopic or open surgery. The blood loss during the procedure was less in the laparoscopic group compared with the open surgery group, although the surgery time was longer in the laparoscopic group. The circumferential resection margin and the macroscopic quality of the total mesorectal excision for both groups were similar. Recovery of bowel function occurred earlier in the laparoscopic group, and less pain was also experienced in this group compared with the open surgery arm. Better physical function, less fatigue and a better quality of life for up to 3 months was noted in the laparoscopic arm. Moreover, fewer micturition, gastrointestinal and defecation complications were noted in patients receiving laparoscopy.

The good results obtained from this study may also reflect the fact cT4 lesions

were excluded and the fact BMI was low compared with previous trials. In this study, the surgeries were performed by seven experienced surgeons from three hospitals in which more than 200 rectal cancers are treated annually.

“This trial shows laparoscopic surgery, when done by skilled surgeons, is feasible and does not increase short-term oncological risks after preoperative chemoradiotherapy for mid or low rectal cancer,” Kang comments.

Lisa Hutchinson

Original article Kang, S.-B. *et al.* Open versus laparoscopic surgery for mid to low rectal cancer after neoadjuvant chemoradiotherapy (COREAN trial): short-term outcomes of an open-label randomized controlled trial. *Lancet Oncol.* **11**, 637–645 (2010)