Editorial

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Effect of the Enhanced Recovery After Surgery protocol After Colorectal Cancer Surgery

Dae Ro Lim

Division of Colon and Rectal Surgery, Department of Surgery, Soonchunhyang University Bucheon Hospital, Soonchunhyang University College of Medicine, Bucheon, Korea

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The enhanced recovery after surgery (ERAS) program is first introduced by Bardram et al. [1] in the mid-1990s, which aims to reduce surgical stress, accelerate the length of postoperative functional recovery, and reduce postoperative morbidity [2]. Since the first guidelines for colorectal surgery were published in 2005, the ERAS Society care pathways include evidence-based items designed to reduces perioperative stress, maintain postoperative physiological function, and accelerate postoperative recovery after colorectal surgery [2, 3]. The ERAS protocol usually contains 3 components; preoperative, intraoperative, and postoperative component. Each subdivided element is diverse, but if it is classified as a large item, the preoperative component includes preoperative counseling, anesthesiology consultation, and carbohydrate loading prior to surgery. The intraoperative component includes perioperative normothermia in the operation room or on arrival to the postoperative recovery unit, multimodal analgesia, prophylaxis of postoperative nausea and vomiting, and postoperative monitoring and fluid therapy. The postoperative component includes adequate postoperative fluid therapy, prevention of postoperative ileus, urinary drainage, glycaemic control, and nutritional care. This ERAS protocol is effective in reducing postoperative complications, improve recovery, and shorten the length of stay in patients after colorectal surgery [4-6]. It is reported that this ERAS protocol is effective not only in elective open colorectal surgery [7], but also in laparoscopic surgery [8], emergency surgery [9], and elderly patient surgery [10]. The ERAS protocol can be considered to reduce postoperative complication by reducing the systemic inflammatory response after colorectal surgery, but few studies have proven the relationship between the ERAS protocol and inflammatory markers (C-reactive protein, interleukin-6, neutrophil-lymphocyte ratio, and so on) [11]. A recent study reported that ERAS protocol can reduce the increase in postoperative neutrophil-lymphocyte ratio in patients with colorectal cancer [12]. However, the study on this is still lacking. Another important point in the ERAS protocol is compliance. The higher the compliance of the patients, the higher benefit will be, and the lower it is, the lower the benefit after surgery [6, 13]. There are various factors affecting ERAS compliance such as age. Therefore, ERAS needs to be improved in the future according to various factors so as to increase compliance through various studies.

A recent published study report that it demonstrated the relationship between the ERAS protocol and inflammatory marker after colorectal cancer surgery. In this well designed study reported that analysis of effect of the ERAS protocol and compliance on postoperative inflammation and short term postoperative surgical outcomes after colorectal surgery [14].

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

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Correspondence to: Dae Ro Lim, M.D.
Division of Colon and Rectal Surgery, Department of Surgery, Soonchunhyang University Bucheon Hospital, 170 Jomaru-ro, Wonmi-gu, Bucheon 14584, Korea
Tel: +82-32-621-6267, Fax: +82-32-621-6950
E-mail: limdaero@schmc.ac.kr
ORCID: https://orcid.org/0000-0002-3076-1391

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