



Selection of Adjuvant Treatment Without Neoadjuvant Chemoradiotherapy for Patients With Rectal Cancer: Room for Further Investigation

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Enormous progress has been made in the treatment of patients with rectal cancer to improve oncologic outcomes. The establishment of the principle of the total mesorectal excision was the most important advance from a surgical perspective, and it decreased local recurrence to less than 10% [1]. Along with surgical progress, the adjuvant treatment has also changed. Over the last decade, the introduction of preoperative chemoradiotherapy (PCRT) was the most important change in the treatment of patients with rectal cancer [2, 3]. Now, much of the interest regarding the treatment of such patients is focused on PCRT-related issues: extended indications for PCRT, modification of PCRT, the waiting interval after completion of PCRT, adjuvant chemotherapy after PCRT, and surgical options after PCRT.

Although PCRT is one of the standard treatments for patients with locally advanced rectal cancer, concerns still exist regarding its use. The insufficient and inconsistent accuracy of clinical staging of rectal cancer is a critical limitation [4, 5] because of the possibility of undertreatment, as well as overtreatment. In addition, effort are continuously being made to identify patients who will benefit from PCRT because the response of patients to PCRT is quite variable and the unnecessary disadvantages of PCRT should be avoided, especially when its use may not be beneficial. As a result, the demand for selective use of PCRT has increased and the number of patients who will need to consider adjuvant treatment

is expected to increase, so the role and proper use of adjuvant treatment need to be considered.

The National Institute of Health of United States conference in 1990 came to the consensus that a combination of chemotherapy and radiation therapy after a radical surgical resection should be used as the standard treatment for stage 2 and 3 patients [6]. Although postoperative chemoradiotherapy for patients with rectal cancer has improved the overall survival and local control [7, 8], discussions regarding tailored administration of adjuvant treatments are not sufficient.

Kang et al. [9] compared the disease-free survival, local recurrence, and overall survival of patients who had undergone postoperative chemotherapy and chemoradiotherapy for rectal cancer without preoperative chemoradiation. They analyzed retrospective data from 9 hospitals. Although that study had various limitations in terms of the heterogeneity of the patients, the use of various types of chemotherapy, a limited number of patients, and lack of subgroup analysis and was unable to reflect changes in the chemotherapeutic agent, the authors insisted that the addition of radiation therapy in an adjuvant setting would not improve overall and disease-free survival. Furthermore, the addition of radiation therapy had no effect on local recurrence. Although these results were quite different from the results of previously conducted randomized controlled trials [7, 8], the authors did not present the results of any additional analyses based on subgroups, such as the location of the tumor, its stage, and the circumferential resection margin status, all of which might affect recurrence, that might explain those differences. Although multivariate analyses including various factors were done, the characteristics of the chemotherapy and the chemoradiotherapy groups were quite different, and comparisons between the 2 groups were limited. However, the study of Kang et al. [9] did present the oncologic outcomes from actual practice for patients with rectal cancer.

Concerns may exist regarding the use of radiation therapy in the treatment of patients with upper rectal cancer (or intraperitoneal rectal cancer). Indeed, the role of chemotherapy in the treatment of patients with stage 2 rectal cancer without risk factor is not

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clear. Therefore, the tailored use of adjuvant treatment and unsolved issues concerning such treatment require further investigation. Although Kang et al. [9] did not present any actual criteria for the “selective use” of adjuvant treatment for patients with rectal cancer, they did suggest a need for further investigation of tailored adjuvant chemo- or chemoradiotherapy for the treatment of such patients. In the future, we hope to see the results of extensive subgroup analyses reflecting clinical requirements.

CONFLICT OF INTEREST

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

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