Adjuvant chemotherapy in patients with stage II colon cancer

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Article: The efficacy of chemotherapy in the patients with stage II colon cancer associated with number of high-risk factors (Kim MJ, et al. Korean J Clin Oncol 2018;14:116-9)

The purpose of adjuvant chemotherapy after curative resection of colon cancer is eradication of micrometastatic disease, decreasing the recurrence and improving the overall survival. However, chemotherapy may have risk of side effects, and decrease the quality of life. Therefore, the decision making to adding chemotherapy should be made under considering the balance between the risk of recurrence and chemotherapy.

The advantage of adjuvant chemotherapy in stage III colon cancer is well proven by many randomized controlled trials and now it is regarded as a standard treatment [1]. As for the regimen, traditional 5-fluorouracil (5-FU) and leucovorin, capecitabine monotherapy, FOLFOX, or CAPOX are recommended.

However, in stage II colon cancer, if the curative resection was performed, the prognosis is very good and the overall survival after curative resection is reported around 80% [2,3]. The role of adjuvant chemotherapy in stage II colon cancer is minimal and remains an area of great controversy [4]. And which patients will benefit from adjuvant chemotherapy and what chemotherapy to use also remain an area of great controversy. Because patients with stage II colon cancer comprise a heterogeneous combination including stage IIA (pT3N0), stage IIB (pT4aN0), and stage IIC (pT4bN0).

Current guidelines recommend adjuvant chemotherapy for stage II colon cancer for the patient with high-risk factors for recurrence such as poorly differentiated histology (exclusive of those cancers that are high microsatellite instability [MSI-H]), lymphatic/vascular invasion, bowel obstruction, < 12 lymph nodes examined, perineural invasion, localized perforation, or close, indeterminate or positive margins.

As for the adding oxaliplatin, according to the subgroup analysis of MOSAIC and NSABP C-07 trial, no significant benefit was found by adding oxaliplatin to 5-FU and leucovorin to stage II colon cancer [5,6]. Therefore, considering the potential risk of side effects of oxaliplatin including neuropathy, it is not recommended to adding oxaliplatin in stage II colon cancer patients.

Another factors should be considered is mismatch repair or MSI testing. it should be performed before deciding adjuvant chemotherapy for stage II colon cancer, because MSI-H patients may have a good prognosis and do not benefit from 5-FU adjuvant therapy [7].

The authors tried to find which patient could omit the adjuvant chemotherapy in stage II colon cancer. And they found that the patients with only one high-risk factor for the recurrence may not have significant benefit by adjuvant chemotherapy [8]. However, it should be interpreted cautiously, because to prove a small potential benefit of adjuvant chemotherapy in stage II colon cancer, large population are inevitably needed.

In conclusion, considering all above factors, conversation between clinicians and patients regarding the potential risks and benefits with adjuvant chemotherapy for stage II colon cancers is very important for decision making. And personalized treatment should be performed.

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CONFLICT OF INTEREST

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

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