The impact of adding mitomycin-C to radiotherapy plus oral tegafur-uracil on advanced-stage rectal cancer

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Dear Editor,

We read the recent publication in the *Journal of the Chinese Medical Association* entitled "The effect of Mitomycin-C in neoadjuvant concurrent chemoradiotherapy for rectal cancer." with an interest.[1] The authors attempted to evaluate the feasibility and effectiveness of the additional use of mitomycin-C (MMC) in the standard neoadjuvant concurrent chemoradiation (CCRT) with a combination of radiotherapy and oral tegafur-uracil.[1] Their primary and secondary aims were tumor response and either disease-free survival (DFS) or overall survival (OS) rates and adverse events (AEs).[1] The authors found that MMC + CCRT group had down-staged the advanced rectal cancer with an odds ratio (OR) of 1.52 (95% confidence interval [CI], 0.99-2.35).[1] Although the aforementioned finding did not reach statistical significance, the authors found down-stage was associated with favorable DFS (OR, 2.2; 95% CI, 1.53-3.1) and OS rates (OR, 1.73; 95% CI, 1.23-2.43).[1] However, based on an increased low-grade AEs in MMC-CCRT group, the authors recommended that MMC-CCRT treatment should be used with caution in older patients and those with impaired bone marrow function. We applauded their success.

We totally agreed that aged patients and patients with impaired bone marrow function may be at increased risk of poor compliance during the treatment; however, this concept may not be limited to cancer treatment, but also can be applicable to all other chronically ill patients.[2–5] We did not find any data in the current article to support the authors' recommendation. Moreover, the authors did not mention the cutoff value to define the aged population or provide information about what's the criteria for identification of impaired bone marrow function.

Since MMC-CCRT treatment did not reach the statistically significant difference to result in a down-staging effect for advanced-stage rectal cancer compared with CCRT treatment alone, and radiation dose and the interval between completing CCRT and surgery also failed to reach the statistically significant difference for the down-staging effect, we are wondering to know which factor was really associated with down-staging effect in their study.

Finally, it is interesting to find that the anastomosis leak rate was statistically significantly increased in the CCRT group compared to MMC-CCRT. Additionally, failure rates (recurrence rates) seemed to be similar between the MMC-CCRT and CCRT groups. If the recurrence rate was similar between both groups, it can be easily expected that MMC-CCRT did not provide any additional benefit in the reduction of recurrence. All make the audience confused about the role of adding MMC to CCRT for the treatment of advanced-stage rectal cancer.

The aforementioned questions do not influence the authors' excellent works. We would like to thank the authors' favorable responses.

REFERENCES

1. Wang LW, Liu YS, Jiang JK. The effect of mitomycin-C in neoadjuvant concurrent chemoradiotherapy for rectal cancer. *J Chin Med Assoc* 2022;**85**:1120–5.
2. Wang PH, Yang ST, Liu CH, Chang WH, Lee FK, Lee WL. Endometrial cancer: Part I. Basic concept. *Taiwan J Obstet Gynecol* 2022;**61**:951–9.
3. Chang WH, Liu CH. Different genders should be considered for the extraglycemic benefits of oral antidiabetic drugs. *J Chin Med Assoc* 2022;**85**:959.
4. Lee WL, Wang PH, Yang ST, Liu CH, Chang WH, Lee FK. To do one and to get more: Part I. Diabetes and bone. *J Chin Med Assoc* 2022;**85**:965–71.
5. Lee WL, Wang PH, Yang ST, Liu CH, Chang WH, Lee FK. To do one and to get more: Part II. Diabetes and metabolic dysfunction-associated fatty liver diseases. *J Chin Med Assoc* 2022;**85**:1109–19.

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