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EDITORIAL

The influence of metastatic lymph nodes at the circumferential resection margin of rectal cancer—Do these lymph nodes require any special attention?

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The improvement in rectal cancer care has led to a marked reduction in local recurrence rates. Implementation of neoadjuvant treatment strategies, improved radiological locoregional staging with magnetic resonance, and precise total mesorectal excision are key features to determine optimal local control for this disease. In this setting, the most significant predictor of local recurrence is circumferential resection margin (CRM) status at the resected specimen. A positive pathological CRM (CRM+) increases significantly the rates of local recurrence, overriding any other patient, tumor, or treatment risk factor. Therefore, all attempts should be directed to identifying patients at risk. This could provide the first step in avoiding this unfavorable surgical outcome.

The situation becomes even more complex depending on the reason for a CRM+. Ultimately, the CRM may be invaded or threatened by the primary tumor but also by mesorectal disease, including metastatic lymph nodes (N+) or even extramural venous invasion (EMVI). It has been suggested that CRM+ due to primary tumor may have distinct clinical consequences from CRM+ to primary metastatic lymph nodes. This particular issue has been addressed by the MERCURY study. CRM+ due to N+ was not considered an independent risk factor for a CRM+ in the resected specimen. Therefore, the authors suggested that this feature should not be considered as an indication for neoadjuvant treatment prior to TME during the management of rectal cancer [1].

In the present issue of Techniques in Coloproctology, Patel et al. have reported on the oncological outcomes of patients managed by TME according to the reason for CRM+ (primary tumor versus N+) [2]. Here, the authors suggest that N+ at the CRM was rarely associated with the development of local recurrence after TME. In contrast, CRM+ due to the primary tumor was a significant risk for local recurrence after TME. Instead, they would like to suggest that these patients with N+ at the CRM are exclusively at increased risk for systemic recurrence.

However logical this may seem at first glance, readers should carefully consider this message in the context of their own clinical practice. Many factors may have influenced local recurrence rates in the study that have not been controlled for. Quality of the mesorectum, different types of neoadjuvant treatment regimens, and final pathological tumor stage are all factors that may have influenced local recurrence rates in addition to the primary reason for CRM+ (primary tumor versus N+). Quality of TME has been shown to impact local recurrence rates and has been used as a surrogate marker for oncological outcomes in multiple prospective trials [3–5]. Here, quality of the TME specimen was particularly suboptimal among patients with CRM+, regardless of the reason (primary tumor or N+). Ultimately, risk factors for local recurrence may be difficult to determine in the setting of suboptimal or variable TME quality and different CRT regimens.

In addition to the risk of local recurrence, the authors here attempt to demonstrate that patients with positive CRM due to N+ were at increased risk for systemic recurrence. When patients with positive CRM (due to N+) were compared to patients with negative CRM, rates of systemic recurrences were higher. Look carefully, however. Patients with negative CRM were not necessarily stage III disease. In contrast, all patients with CRM due to N+ were stage III disease.

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Therefore, it is expected that patients with stage III disease had more systemic recurrence than patients with stage II disease. In fact, when patients with CRM+ (due to N+) were compared to patients with negative CRM, but, with stage III disease, rates of systemic recurrences were no longer different.

Despite these limitations, this very interesting study raises an important question whether patients CRM+ due to N+ should be managed as patients with CRM negative disease, in terms of risk for pathological CRM and local disease control. Clearly, this is an issue to be addressed in future trials taking these potential limitations into consideration. In the meantime, omission of neoadjuvant treatment to these patients should be considered selectively and based upon the premise that optimal TME will be achieved.

Compliance with ethical standards

Conflict of interest The authors declare no conflicts of interest.

Ethical approval No ethical approval was required for this submission.

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