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Comment on "How Does Omitting Additional Surgery After Local Excision Affect the Prognostic Outcome of Patients With High-Risk T1 Colorectal Cancer?"

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We read with interest the paper from Akira Ouchi et al¹ on behalf of the study group for the JSCCR-T. This study is important since the JSCCR criteria for additional surgical resection after local excision of a T1 colorectal cancer (CRC) are used in many countries. We recently published a study comparing the impact of surgery after endoscopic resection (endoscopic mucosal resection or endoscopic submucosal dissection) in high-risk patients with histological risk factors, also using a propensity score matching method.² Our results, obtained in a Western country with the involvement of expert endoscopists and pathologists, are similar to those of Ouchi et al, with a very low rate of local and distant recurrence. These studies demonstrate that the JSCCR histological criteria, used in both works, have a very low sensitivity to predict lymph node invasion and the usefulness of surgery in this situation.

We think that a different approach should be used before considering additional surgery. The first point to consider is the association of each JSCCR criterion with its risk of lymph node metastases.³ It is now well demonstrated that the depth of submucosal invasion is not a risk factor for lymph node invasion, with a very low reproducibility of measurement.⁴ Indeed, this parameter had been chosen by Japanese pathologists to compensate for the low reproducibility of qualitative parameters such as lymphovascular invasion, grades 2 and 3 budding, and the presence of poorly differentiated/signet cell/mucinous adenocarcinoma.

The "positive vertical margin" parameter has also been debated since its definition varied over time. In the case of R1 resection, it has been recently shown that local resection of the scar was associated with a local recurrence rate of 9%, compared to 2.2% with surgery.⁵ The overall survival was similar between the 2 groups since 5 out of 8 patients who presented

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with recurrence after local resection were operated during follow-up.

It is know well admitted that the association of 2 or more qualitative parameters, or lymphovascular invasion alone, are associated with the higher risk of lymph node metastases compared to budding or poor differentiation taken separately.⁶

The second point to consider before additional surgery is the location of the T1 CRC. In our study, all recurrences happened in patients with tumors located in the rectum or in the sigmoid.² A recent paper from Japan clearly showed that tumors originating from the rectum and the left colon, and more precisely the sigmoid, were associated with a high risk of lymph node metastases.⁷ We consider that, in case of omission of additional surgery, these patients should have a close follow-up with pelvic magnetic resonance imaging and/or computed tomography scan to detect early recurrence and offer surgery in case of local recurrence.

The third point to consider is the patient's age at diagnosis. Recently, Rönnow et al⁸ found that, in a large series of patients operated for T1 CRC, in the absence of qualitative parameters suggesting a high risk of lymph node metastases, an age of less than 60 years was associated with a 15% risk of metastases compared to 5% for older patients. Therefore, we think that age should be taken into account as it has also been published before in a large series of patients.⁹ Although the nomogram described by Kajiwara et al¹⁰ did not include age, it could be useful to estimate the risk of lymph node metastases after endoscopic resection of a T1 CRC.

Finally, the fourth point to assess is the microsatellite status of the tumor with microsatellite instability (MSI) found in 10% to 15% of proximal CRC and 5% of rectal carcinoma. Indeed, CRC with MSI, which are often mucinous, is associated with a lower risk of lymph node metastases.¹¹

In conclusion, the paper published by Ouchi et al brings additional knowledge regarding the role of surgery after endoscopic resection of T1 CRC, with the aim of selecting patients who could benefit from a "watch and wait" strategy, as is has been proposed after complete remission of more advanced rectal carcinoma treated with chemotherapy and radiotherapy. Nonetheless, complex cases must be discussed in a dedicated multidisciplinary meeting on the management of superficial cancers of the digestive tract with the involvement of endoscopists, oncologists, pathologists and surgeons.¹²

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