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EDITORIAL

Rectal eversion for direct access to the distal resection margin: do we need another tool in the toolbox of rectal cancer surgery?

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Rectal cancer below the peritoneal reflection is currently one of the most challenging diseases in colorectal surgery. Advances in contemporary imaging, complexities of multimodality approaches and a variety of surgical and even non-surgical alternatives have all led to improvements in local disease control, sphincter and organ preservation and more recently, even in survival [1–6]. Colorectal surgeons in particular, now have plenty of tools to choose from to provide the pathologist with the perfect total mesorectal excision (TME) specimen and patients with an optimal outcome. Perfection here would include an intact TME envelope, sufficient radial and distal margins coupled to optimal anorectal function. In the present issue of Techniques in Coloproctology, Sun et al. [7] describe the oncological and functional outcomes with a procedure popular in eastern countries but not frequently mentioned in western surgical textbooks. After full mobilization of the rectum and TME, transection of the sigmoid allows for the eversion of the rectum through the anus, allowing for tailored determination of the distal resection margin performed under direct vision without the need for the use of fancy endoscopic technology or instrumentation. At a first glance, this variation of the standard intersphincteric resection seems to result in excellent postoperative functional and oncological outcomes. In this setting, one would expect to immediately add this approach to the long list of surgical procedures to be taught and performed to our rectal cancer patients, particularly to the ones located at or very close to the anorectal junction.

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However, a few unanswered questions should at least restrain the most excited reader prior to full implementation of this technique in clinical practice. First, this technique has not yet been tested against any of the other available techniques. The lack of a control group in Sun's study is clearly a significant limitation here. Second, the absence of a clear denominator is also an important limitation. It becomes almost impossible to understand the characteristics of the ideal candidates for this procedure without knowing the exact differences between them and the patients that underwent other surgical alternatives. Ultimately, several prerequisites need to be met prior to attempting rectal eversion. The mesorectum cannot be bulky since its passage through the rectum and anus may be impossible or lead to its disruption. The tumor itself needs also to be sufficiently small to allow for safe passage. The exact ideal tumor location is also unknown. This is particularly important as there needs to be sufficient length of the everted rectum harboring the tumor to allow for safe resection of the specimen under direct vision. Finally, the pelvises of these patients may need to have certain anatomical features. Even though intuitively all of these prerequisites may seem obvious, there is no objective or reproducible criteria for the selection of these patients. The problem here is the risk of tearing the mesorectal envelope, of the primary tumor and perforation of the specimen in a setting where other surgical alternatives could have been successful in avoiding these issues.

Rectal eversion with resection of the distal margin under direct vision is clearly a tool that needs to be available in the toolbox of distal rectal cancer management. It clearly provides an alternative to standard intersphincteric dissections and has a place during the management of select patients and select tumors. Even though we may not yet understand the exact criteria for the selection of ideal candidates for this technique, the successful experience reported by Sun et al. may provide the necessary spark to light future investigations in an attempt to clarify these uncertainties and definitively incorporate this strategy in the armamentarium of

rectal cancer management. Until these selection criteria are clearly available, instead of patients needing an operation, we may be looking at a procedure needing the ideal patient.

Compliance with ethical standards

Conflict of interest The authors declare no conflict of interest.

Ethical approval Not required.

Informed consent Not required.

References

1. Fleshman J, Branda ME, Sargent DJ et al (2019) Disease-free survival and local recurrence for laparoscopic resection compared with open resection of stage II to III rectal cancer: follow-up results of the ACOSOG Z6051 randomized controlled trial. Ann Surg 269:589–595
2. Rullier E, Vendrely V, Asselineau J et al (2020) Organ preservation with chemoradiotherapy plus local excision for rectal cancer: 5-year results of the GRECCAR 2 randomised trial. Lancet Gastroenterol Hepatol 5:465–474
3. Jayne D, Pigazzi A, Marshall H et al (2017) Effect of robotic-assisted vs conventional laparoscopic surgery on risk of conversion to open laparotomy among patients undergoing resection for rectal cancer: the ROLARR randomized clinical trial. JAMA 318:1569–1580
4. Roodbeen SX, Spinelli A, Bemelman WA et al (2020) Local recurrence after transanal total mesorectal excision for rectal cancer: a multicenter cohort study. Ann Surg. https://doi.org/10.1097/SLA.0000000000003757
5. Habr-Gama A, Sao Juliao GP, Vailati BB et al (2019) Organ preservation in cT2N0 rectal cancer after neoadjuvant chemoradiation therapy: the impact of radiation therapy dose-escalation and consolidation chemotherapy. Ann Surg 269:102–107
6. Efetov SK, Tulina IA, Kim VD et al (2019) Natural orifice specimen extraction (NOSE) surgery with rectal eversion and total extra-abdominal resection. Tech Coloproctol 23:899–902
7. Sun G, Lou Z, Zhang H et al (2020) Retrospective study of the functional and oncological outcomes of conformal sphincter preservation operation in the treatment of very low rectal cancer. Tech Coloproctol. https://doi.org/10.1007/s10151-020-02229-2