

Preoperative repeat endoscopy for colorectal cancer: What is its role and when is it necessary?

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SUMMARY

Many surgeons consider repeat endoscopy to be the standard of care for colorectal cancer; however, its utility in the preoperative setting is not well understood, especially given the lack of standardized guidelines on appropriate tumour localization and colonoscopic reporting. This often results in patients undergoing an unnecessary medical procedure during their preoperative evaluation. We discuss some of the issues surrounding the practice of preoperative repeat endoscopy as well as patient perspectives on the procedure. Our observations suggest that repeat endoscopy in the setting of colorectal cancer surgery may play a role in enabling transition of patient care between the initial endoscopist and the treating surgeon and in improving the patient experience. Patients with operable colorectal cancer appear to understand and support the current use of repeat endoscopy. However, improving preoperative care will require further research and ultimately the development of evidence-based clinical guidelines.

Although colonoscopy is the gold standard for the surveillance and diagnosis of colorectal cancer, preoperative repeat endoscopy is often used to ensure accurate tumour localization before surgery. For instance, a reported 40.5% of patients undergoing colorectal cancer surgery at a multi-institution tertiary care centre underwent preoperative repeat endoscopy between 2008 and 2011.¹ The most common indications cited were tattooing of the lesion, optimal surgical planning and repeated therapeutic attempt.¹ This practice has, in part, resulted from a shift in surgical management, with increasing reliance on minimally invasive techniques, but also from a lack of standardized guidelines on appropriate tumour localization, including tattooing, and optimal colonoscopic reporting among clinicians.^{2,3} However, despite its increasing use and potential role in correcting localization errors, the procedure itself carries inherent risk, may lead to patient discomfort, and is associated with a delay to definitive treatment.⁴ Given that the current evidence surrounding the utility of repeat endoscopy is limited, this raises important questions about its role in preoperative care and the need for evidence-based clinical guidelines that identify when a repeat endoscopy is necessary and when it is not. For instance, do patients who have an initial endoscopy along with radiographic imaging (e.g., staging computed tomography [CT] scan) require a subsequent endoscopy before surgery?

Recent studies have explored discrepancies between general surgeons' and gastroenterologists' perspectives on repeat endoscopy and variability in localization practices.^{2,3} However, as an intervention that may not be necessary in every case and that may increase the burden on patients receiving cancer care, it is important to also consider the patients' understanding and perceptions of repeat endoscopy. Thus, we surveyed patients in our colorectal practice to further explore the role of repeat endoscopy and improve the quality and experience of preoperative care.

First, preoperative repeat endoscopy appears to play a role in improving care transitions. Most of our patients have their initial diagnostic colonoscopy at an external institution. This is reported as a common indication for preoperative repeat endoscopy given the variety of localization techniques used by endoscopists and the lack of standardization in endoscopic reports.² In fact, Al Abbasi and colleagues¹ found a decrease in the repeat endoscopy rate when the operating surgeon was consulted at the time of the initial endoscopy. The clinical reasoning behind tattooing and accurate localization of the lesion was well understood by patients, and they favoured the idea of having their surgeon perform a second endoscopy. Patients believed that this would give the surgeon a better understanding of their cancer and ultimately support operative planning. This finding raises a controversial issue with respect to who should perform the screening or diagnostic colonoscopies in order to improve efficiency of cancer care and reduce tumour localization errors.⁵

Second, repeat endoscopy may improve the patient experience, specifically by playing a role in supporting patients' confidence in their care. Most patients perceived the repeat endoscopy as a positive experience, as a means to obtain a second opinion and as a procedure that provides additional information to optimize treatment. Understandably, patients are often more receptive to doctors' recommendations for endoscopic procedures deemed necessary to advance their care; however, patients' opinions may differ depending on whether they experience adverse outcomes either after the colonoscopy or the ultimate surgery. Additionally, while repeat endoscopy contributes to a longer preoperative evaluation process,⁴ this may in fact help patients come to terms with their cancer diagnosis, which can often be difficult, since the time from diagnosis to treatment has become increasingly abbreviated with shorter wait time targets and the emergence of expedited programs (e.g., same-day diagnostic programs).

Finally, any concerns patients had with repeat endoscopy were overridden by their preoccupation with their cancer diagnosis, treatment and postoperative quality of life. The possibility of having to live with a colostomy or having chemotherapy and radiation was a major patient stressor. This highlights the importance of strengthening preoperative patient education, specifically with respect to ostomy care, as well as psychological support and postoperative follow-up. Our survey identified an opportunity to improve the psychosocial support offered to patients.

As a consequence of existing practice patterns and the lack of clinical guidelines on appropriate tumour localization and synoptic reporting, patients may need to endure a second medical procedure during the course of their cancer care. Since patients with cancer are particularly vulnerable and often defer decision-making to their health care providers, it is important to focus on patient education and transitions of care in this setting. Moreover, patient participation and widespread stakeholder engagement will be important to improving preoperative care for colorectal cancer in the future. For instance, should more general surgeons perform screening colonoscopies to improve continuity of care from diagnosis to treatment, or would improved psychosocial support for patients appropriately serve this need? Our observations provide insight into patient perspectives on repeat endoscopy and may be used to inform the development of standardized guidelines. Further research is necessary to better understand the rate of preoperative repeat endoscopy across the province as well as the conditions under which repeat endoscopy may be safely omitted. Decreasing the incidence of repeat endoscopy may also require reform of colonoscopy reporting.

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References

1. Al Abbasi T, Saleh F, Jackson T, et al. Preoperative re-endoscopy in colorectal cancer patients: an institutional experience and analysis of influencing factors. *Surg Endosc* 2014;28:2808-14.
2. Azin A, Jimenez C, Cleghorn M, et al. Discrepancy between gastroenterologists' and general surgeons' perspectives on repeat endoscopy in colorectal cancer. *Can J Surg* 2016;59:29-34.
3. Jimenez MC, Azin A, Saleh F, et al. Preoperative repeat endoscopy for colorectal cancer: attitudes, perceptions and practices of general surgeons. Poster session presented at the meeting of the Society of Gastrointestinal and Endoscopic Surgeons, Salt Lake City, Utah, April 2014.
4. Saleh F, Abbasi T, Cleghorn M, et al. Preoperative endoscopy localization error rate in patients with colorectal cancer. *Surg Endosc* 2015;29:2569-75.
5. Azin A, Saleh F, Cleghorn M, et al. A comparison of endoscopic localization error rate between operating surgeons and referring endoscopists in colorectal cancer. *Surg Endosc*. 2016 Jul 22. [Epub ahead of print].