



Invited Commentary

Induction short-course radiotherapy with consolidation chemotherapy for locally-advanced rectal cancer: Is a long run and short slide preferred?

Drs. Liu et al. have provided an excellent review of patients with locally-advanced rectal cancers (LARC) treated with neoadjuvant short course radiotherapy (SCRT), with a primary study focus on whether the time interval between the conclusion of SCRT and surgical resection is associated with a diminished quality of total mesorectal excision (TME). The authors are an esteemed, multidisciplinary group of cancer specialists who work at an equally esteemed institution. The study population (2017–2023) includes certain variabilities, such as the number of patients who received a complete course of consolidation chemotherapy prior to surgery as opposed to patients receiving a portion of planned chemotherapy prior to surgery with additional infusions provided as adjuvant therapy. The study population also varies regarding the number of weeks between the conclusion of SCRT and the timing of surgery. While these elements represent potential limitations to a retrospective methodology, they also provide an example of the real-life factors, and challenges, of treating rectal cancer patients especially at referral centers that attract patients from long distances.

For patients who received neoadjuvant therapy and underwent surgery, a complete or a near-complete TME was achieved in approximately 90 % of subjects. Of particular interest, and in contradistinction to certain prior publications, the time interval between conclusion of radiotherapy and the date of surgery did not demonstrate an association with the quality of TME in this study. The study findings are similar in certain respects to the Stockholm III trial [1] which compared SCRT with immediate surgery, SCRT with a delay of 48 weeks prior to surgery, and chemoradiotherapy with surgery 4–8 weeks thereafter. This prior trial observed that SCRT with delay had similar disease control compared to SCRT without delay; while SCRT with delay had a higher incidence of radiation-induced toxicity, postoperative complications were lower than SCRT followed by immediate surgery.

One of the values of the study by Liu and colleagues is drawing greater attention to the benefits of SCRT, which has traditionally been

used to a greater degree in Europe than in the United States. Not only does SCRT provide a biologically equivalent radiation dose as compared to “long course” radiotherapy, but it also provides greater convenience to patients who can complete their radiation in approximately one calendar week. Prior concerns about SCRT followed by immediate surgery not allowing time for cytoreduction are now further addressed with a total neoadjuvant therapy paradigm, providing what was once adjuvant chemotherapy as a preoperative consolidation treatment, and thus allowing patients every opportunity for downstaging and, potentially, a complete clinical response.

CRedit authorship contribution statement

David B. Stewart: Conceptualization, Formal analysis, Writing – original draft, Writing – review & editing.

Declaration of competing interest

The author has no disclosures.

References

- [1] [Erlandsoon J, Holm T, Pettersson D, et al. Optimal fractionation of preoperative radiotherapy and timing to surgery for rectal cancer \(Stockholm III\): a multicentre, randomised, non-blinded, phase 3, non-inferiority trial. *Lancet Oncol* Mar 2017;18\(3\):336–46.](#)

David B. Stewart
 Professor and Division Chief, General Surgery, SIU Department of Surgery,
 701 N. First Street, P.O. Box 19638, Room D326, Springfield, IL 62794-
 9638, United States of America
 E-mail address: dstewart52@siumed.edu.