The ‘Watch-and-Wait’ Approach for Rectal Cancer: Are Outcomes Improved With More Limited T Stage and Routine Use of MRI for Staging?

October 15, 2013 | Oncology Journal [1], Colorectal Cancer [2], Gastrointestinal Cancer [3]

We also propose that limiting the watch-and-wait strategy to patients with T1/T2N0 rectal cancer and using adequate T staging with MRI will result in improvements in local control and patient outcomes.

In this issue of ONCOLOGY, Drs. Das and Minsky provide an excellent review of the current evidence for a watch-and-wait approach to the management of rectal cancer.[1] The watch-and-wait approach could potentially reduce treatment-related toxicity in selected rectal cancer patients who have a clinical complete response (cCR) after chemoradiation. Studies from Brazil,[2,3] the United Kingdom,[4] and the Netherlands[5] appear to support this approach, whereas a number of other studies raise concerns about high rates of local recurrence with the omission of surgery. The authors point out that clinical outcome following a watch-and-wait strategy depends on accurate assessment of the response to chemoradiation, and that current methods of assessing tumor response are limited and do not always predict pathologic complete response (pCR).

We agree that the watch-and-wait strategy could potentially reduce treatment-related toxicity and improve functional outcomes in selected rectal cancer patients. We propose that concerns about high rates of local recurrence can be further addressed by improving patient selection and methods of determining not only response to treatment, but also the initial assessment of T stage. Das and Minsky recognize that advances in imaging techniques may improve the accuracy of response assessment, and they discuss the promise of magnetic resonance imaging (MRI). They state that MRI is widely used for initial staging for rectal cancer, and that recent studies, discussed above, have already used MRI for evaluating tumor response.[5-8] However, they caution that the use of MRI for assessment of tumor response needs to be validated in prospective trials.

We agree that a structured, predefined method of response assessment and follow-up is needed for a watch-and-wait strategy, and the optimal timing and frequency of these assessments should be investigated further. Outcomes of the watch-and-wait approach may also be influenced by patient selection based on initial staging, however. Advanced disease at initial evaluation and levator ani involvement are factors known to be associated with a high-risk for local recurrence. The Working Group of Surgical Oncology/Working Group of Radiation Oncology/Working Group of Medical Oncology of the Berlin Cancer Society (CAO/ARO/AIO)-94 study[9] demonstrated that the ultrasound and digital rectal examination (DRE) method of determining local T stage in rectal cancer (commonly used in the United States) led to overstaging, as 18% of patients in the immediate-surgery arm who were considered to be stage cT3/T4 were proven on histologic examination to have early tumors (pT1/T2 pN0). Furthermore, the Trans-Tasman Radiation Oncology Group (TROG) 01.04 study included staging with transrectal ultrasound (TRUS) or MRI but accepted CT scans when MRI or ultrasound was not possible; the study investigators found that evaluation of local tumor extent (in terms of risk of circumferential margin or levator ani involvement) was limited in patients who were not assessed by MRI.[10] These data further support the routine use of MRI staging in patients being considered as candidates for the watch-and-wait approach, so that the probability of local control can be optimized.

A survey of 173 international colorectal centers, published by Augestad et al,[11] was designed to assess whether there is a consensus in the management of rectal cancer. In this study the authors also addressed clinicians’ preference for imaging examinations to be included in the preoperative staging workup. Recommendations for preoperative imaging varied widely: 55% preferred to use CT scan, 35% MRI, 29% endorectal ultrasound (ERUS), 12% DRE, and 1% PET scan in all rectal cancer cases. These data suggest that even though MRI appears to be a more accurate method of locoregional staging—particularly T stage, it is not routinely used in staging rectal cancer.

We propose that the routine use of MRI in initial assessment of rectal cancer T stage can also
improve patient selection for the watch-and-wait treatment strategy. Preoperative chemoradiation yields pCR rates of about 10% to 20% in rectal cancer patients who undergo neoadjuvant chemoradiation.\[12-16\] Although the pCR rate of chemoradiation in locally advanced rectal cancer is well known, data on pCR rates in patients with early rectal cancer are limited. A recent notable report in this setting is the American College of Surgeons Oncology Group (ACOSOG) Z6041 trial, a prospective, multicenter, phase II study assessing the efficacy and safety of neoadjuvant chemoradiation using capecitabine and oxaliplatin followed by local excision; in this trial, the investigators identified a much higher pCR rate (44%) for patients with T2N0 rectal cancer in whom T stage was established by either ERUS or endorectal coil MRI.\[17\] However, it is important to bear in mind that the 44% pCR rate reported in this trial may be an overestimate. Assessment of pCR requires both the primary site and lymph nodes to be free of tumor, and in this trial of local excision, lymph nodes were not routinely examined, further emphasizing the importance of routine use of optimal imaging techniques in response assessment following chemoradiation.

In conclusion, we agree with Drs. Das and Minsky that the watch-and-wait approach demonstrates promise in a subset of patients with localized rectal cancer, although additional clinical studies are warranted to establish the safety and efficacy of the watch-and-wait strategy, ideally within a prospective clinical trial. Systematic methods of assessing treatment response with close follow-up are important, but such methods are not clearly defined and will clearly impact the cost of managing these patients. We also believe that ideally, these strategies should incorporate the routine use of MRI not only following chemoradiation, but also for assessment of initial stage in patients with rectal cancer. We also propose that limiting the watch-and-wait strategy to patients with T1/T2N0 rectal cancer and using adequate T staging with MRI will result in improvements in local control and patient outcomes. In addition, advances in imaging technology and in our understanding of tumor biology may further improve patient selection and the evaluation of tumor response in the future. The promise of more effective chemoradiation regimens may also enhance the outcomes of nonoperative approaches and expand patient selection criteria to include a broader patient population.

Disclosures:
The authors have no significant financial interest or other relationship with the manufacturers of any products or providers of any service mentioned in this article.

References:


Source URL: http://www.cancernetwork.com/oncology-journal/watch-and-wait-approach-rectal-cancer-are-outcomes-improved-more-limited-t-stage-and-routine-use

Links:
[1] http://www.cancernetwork.com/oncology-journal
[4] http://www.cancernetwork.com/authors/suzanne-russo-md
[5] http://www.cancernetwork.com/authors/william-blackstock-jr-md