Platinum Priority


Optimal Timing for Postoperative Radiation: Still an Unanswered Question

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This excellent editorial by Chen [1] highlights key points from our review on the management of recurrent prostate cancer [2] and affirms the lack of level I evidence to guide treatment in the salvage setting. To elucidate the effectiveness of postoperative radiotherapy (RT), the author discusses the impact of adjuvant RT in three randomized trials comparing adjuvant RT with observation in men with high-risk features following radical prostatectomy (RP) [3–5]. We considered a discussion of adjuvant radiation but ultimately decided against it because it was not within the scope of our defined task: the management of recurrent prostate cancer. Our review focused on patients who had already experienced a recurrence; henceforth, by definition, there was no role for adjuvant therapy. However, we agree that these trials may enlighten a discussion of salvage therapy.

Although all of these trials found a benefit with adjuvant RT on prostate-specific antigen (PSA) progression, two of the three trials did not show a similar benefit for survival with adjuvant radiation. Notably, the only trial that showed a significant overall survival benefit with adjuvant RT, the Southwest Oncology Group (SWOG) S8709 trial, had a significant imbalance in Gleason grade between the two arms, with the observation arm having almost double the proportion of Gleason 8–10 tumors (16% vs 9%) [3]. Furthermore, only 33% of patients in the observation arm received local salvage radiation throughout their follow-up. In the European Organization for Research and Treatment of Cancer (EORTC) trial, where the arms were more balanced and 56% of the observation group received salvage RT, there was no difference in survival between the treatment groups [4]. These trials were designed to compare adjuvant RT with observation, and they are unable to extrapolate to adjuvant versus early salvage RT. Salvage RT in the observation arms was not delivered under a directed protocol and was administered relatively late in both the SWOG and EORTC studies [3,4]. Finally, none of these studies used ultrasensitive PSA testing, which allows the detection of recurrent cancer early in the disease course [6,7]. Observational studies looking at salvage RT have suggested that it is more effective when given earlier in the disease course and ideally at the first signs of recurrence [8,9]. Perhaps the use of ultrasensitive PSA testing will allow more timely intervention with salvage RT, thereby enhancing its efficacy. If future trials show equipoise between early salvage and adjuvant RT, that will allow better selection of men who are likely to progress and benefit from timely intervention with RT and will limit unnecessary treatment for men who do not require it.

Ongoing randomized trials are anticipated to inform us about the need for and timing of postoperative radiation [10]. The author of this editorial [1] points out the low


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utilization of both adjuvant and salvage RT after RP, ultimately resulting in the increased use of androgen deprivation and its associated adverse effects. We agree that this trend is concerning. Thus, although the optimal timing of RT remains controversial, we firmly believe that timely postprostatectomy RT can be life saving for some men.

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**References**


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