Contemporary role of radiation therapy in the adjuvant or salvage setting following radical prostatectomy.

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Abstract

PURPOSE OF REVIEW: Adjuvant and salvage radiotherapy after radical prostatectomy have an established role in the management of high-risk patients. We discuss contemporary data on optimal timing and doses of radiotherapy, role of hormonal therapy and pelvis irradiation, and toxicity.

RECENT FINDINGS: Positive surgical margins are not predictive of reduced overall survival, even in patients treated with adjuvant radiotherapy. Salvage irradiation fails to decrease the risk of death. In both adjuvant and salvage settings, radiation doses more than 66-70 Gy result in a significant improvement of biochemical relapse-free survival, whereas hormonal therapy is still of unproven effect. Early referral for salvage radiotherapy might be as effective as adjuvant irradiation, although only less than 50% of patients whose prostate-specific antigen is more than 0.5 ng/ml at referral benefit from salvage radiotherapy. The prophylactic irradiation of pelvic nodal area may have a role in postprostatectomy irradiation owing to the risk of occult lymph-nodal metastases. New radiotherapy techniques lead to a significant reduction in rectal, but not urinary, toxicity.

SUMMARY: Ongoing Phase III trials will address the role of hormonal therapy and pelvic irradiation in combination with standard dose adjuvant and salvage radiotherapy. In the case of positive results, these findings should be confirmed also in combination with high radiation doses.

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