Improving outcomes in high-risk prostate cancer with radiotherapy.

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Abstract

There have been significant improvements in the radiotherapeutic management of patients with high risk prostate cancer. Randomized trials have clearly demonstrated improved outcomes with the combination of radiotherapy in conjunction with androgen deprivation. While these trials have utilized low doses of radiotherapy in the range of 70 Gy, recent studies have suggested that significant benefits of combined androgen deprivation therapy with dose escalated radiotherapy are also observed. The use of high radiation dose levels in the setting of high risk prostate cancer is important, and strategies which combine external beam radiotherapy with a brachytherapy boost may provide an opportunity for even greater intensification of the radiation dose to the prostate target. Systemic therapies, second generation anti-androgen therapy and novel targeted agents integrated with radiotherapy will open up new vistas and challenges for further improved outcomes in patients with high-risk disease.

KEYWORDS: Androgen receptor, Androgen-deprivation therapy, Anti-androgen agents, External beam radiation therapy, High-risk prostate cancer