

Dose-escalated hypofractionated IMRT, conventional IMRT for prostate cancer have like side effects

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Dose-escalated intensity modulated radiation therapy (IMRT) with use of a moderate hypofractionation regimen (72 Gy in 2.4 Gy fractions) can safely treat patients with localized prostate cancer with limited grade 2 or 3 late toxicity, according to a study published in the April 1, 2014 edition of the *International Journal of Radiation Oncology, Biology, Physics (Red Journal)*, the official scientific journal of the American Society for Radiation Oncology (ASTRO).

Previous [randomized clinical trials](#) have shown that dose-escalated radiation therapy improves prostate cancer control compared to lower-dose conventional radiation therapy. Conventional fractionation of dose-escalated radiation therapy (1.8 or 2 Gy fractions) can take up to nine weeks to complete, while hypofractionated radiation therapy can deliver a higher biologically effective dose over a shorter period of time (six weeks) and has the potential to increase prostate cancer control without increasing toxicity. However, there are limited data on the late toxicity of moderate hypofractionated regimens for prostate cancer. This randomized trial from the University of Texas MD Anderson Cancer Center compares the late toxicity outcomes of men with localized prostate cancer treated with either conventionally fractionated IMRT (CIMRT) or dose-escalated hypofractionated IMRT (HIMRT).

Men with organ-confined prostate cancer were enrolled in this institutional review board-approved trial from January 2001 to January

2010 and were randomized to receive either CIMRT (75.6 Gy in 1.8 Gy fractions over eight-and-a-half weeks) or HIMRT (72 Gy in 2.4 Gy fractions over six weeks). Eligible patients had biopsy-proven prostate adenocarcinoma; good performance status; stage T1b-T3b disease; a prostate-specific antigen (PSA) ≤ 20 ng/ml; a Gleason score

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