



Re: Surgery Versus Radiotherapy for Clinically-localized Prostate Cancer: A Systematic Review and Meta-analysis

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Eur Urol 2016;70:21-30. doi: 10.1016/j.eururo.2015.11.010.

EDITORIAL COMMENT

Radical treatment options for patients with clinically-localized prostate cancer include radical prostatectomy and radiotherapy. Since there is no level 1 evidence comparing the efficacy of these two modalities, Wallis and coworkers conducted a systematic review and meta-analysis to compare the data on overall and prostate cancer-specific survival among patients treated with radiotherapy or radical prostatectomy for clinically-localized prostate cancer. Nineteen studies were selected and up to 118,830 patients were pooled. Of note, only two studies provided "dose-escalated" external beam radiotherapy treatments to all radiotherapy patients. The risk of overall (10 studies, aHR 1.63, 95% confidence interval 1.54-1.73, $p < 0.00001$; $I^2 = 0\%$) and prostate cancer-specific (15 studies, aHR 2.08, 95% confidence interval 1.76-2.47, $p < 0.00001$; $I^2 = 48\%$) mortality were higher for patients treated with radiotherapy compared with those treated with surgery. Subgroup analyses by risk group, radiation regimen, time period, and follow-up length did not alter the direction of results. They concluded that radiotherapy for prostate cancer is associated with an increased risk of overall and prostate cancer-specific mortality compared with surgery based on observational data. The methodological limitations of observational studies should be considered while interpreting the results. The ProtecT trial and SPCG-15 trial comparing radical prostatectomy to radiotherapy among patients with low/intermediate and high-risk cancer respectively are awaited.

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