



Insufficient evidence for low-dose brachytherapy in localised prostate cancer

Clinical question

How effective is low-dose rate brachytherapy (LDR-BT) in men with localised prostate cancer?

Bottom line

Compared with radical prostatectomy, LDR-BT did not reduce biochemical recurrence-free survival at 5 years. For short-term (6 months) severe adverse events, LDR-BT was significantly more favourable for urinary incontinence, but radical prostatectomy was significantly more favourable for urinary irritation. The occurrence of urinary stricture did not significantly differ between the treatment groups. There were no significant differences in mean scores between treatment groups for patient-reported outcomes or health-related quality of life.

Caveat

Evidence was based on 1 randomised controlled trial with high risk of bias. Essential requirements of low-risk trials, such as concealment of allocation, description of patient data “lost” to follow-up, and intention-to-treat analysis were not fulfilled. And a priori sample size calculation was not reported.

Context

Localised prostate cancer is a slow growing tumour for many years for the majority of affected men. LDR-BT is short-distance radiotherapy using low-energy radioactive sources, and has been recommended for men with low-risk localised prostate cancer.

Cochrane Systematic Review

Peinemann F et al. Low-dose brachytherapy for men with localized prostate cancer. Cochrane Reviews, 2011, Issue 7. Article No. CD008871. DOI: 10.1002/14651858.CD008871.pub2. This review contains 1 study involving 200 participants.

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