

Is the increased life expectancy worth the potential adverse effects for those undergoing radical prostatectomy for localised prostate cancer?

Clinical Question

What are the effects of radical prostatectomy (RP) compared with deferred treatment, including active surveillance/active monitoring and watchful waiting (WW), for clinically localised prostate cancer?

Bottom Line

Men with clinically localised prostate cancer are at relatively low risk for disease-related morbidity and mortality. The results of this review demonstrate substantial benefit of RP over WW with regard to oncological outcomes, Time to death from any cause after 20 years was 733/1000 men in the WW group versus 648/1000 men in the RP group, Time to death from prostate cancer after almost 20 years was 114/1000 men in the WW group versus 67/1000 men in the RP group, However, such benefit is realised only by men with an expected life expectancy of well over 10 years. Given that all men undergoing surgery are at increased risk for urinary incontinence RR 3.97(CI 2.34 to 6.74), and erectile dysfunction RR 2.67 (CI 1.63 to 4.38) and resulting diminished quality of life, careful patient selection based on disease characteristics, medical comorbidities, and patient expectations appears critical. Ultimately, the decision of radical prostatectomy versus deferred treatment will depend on the values and preferences of each individual patient and the importance that each patient places on the potential for prolonging progression-free life versus the increased risk for potential adverse events, including erectile dysfunction and urinary incontinence.

Caveat

The quality of evidence was graded as moderate to low. The main reason for rating down for study limitations was concern over performance bias, given lack of blinding of participants, which was not practical in any of the included trials.

Context

Prostate cancer is a common cancer but is oftentimes slow growing. When confined to the prostate, radical prostatectomy (RP), which involves removal of the prostate, offers potential cure that may come at the price of adverse events. Deferred treatment, involving observation and palliative treatment only (watchful waiting (WW)) or close monitoring and delayed local treatment with curative intent as needed in the setting of disease progression (active monitoring (AM)/surveillance (AS)) might be an alternative.

Cochrane Systematic Review

Vernooij RWM, Lancee M, Cleves A, Dahm P, Bangma CH, Aben KKH. Radical prostatectomy versus deferred treatment for localised prostate cancer. Cochrane Database of Systematic Reviews 2020, Issue 6. Art. No.: CD006590. DOI: 10.1002/14651858.CD006590.pub3. This review contains 4 trials with a total of 2,635 participants.

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Systematic review link:

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD006590.pub3/full#CD006590-sec1-0007>