Radical prostatectomy or watchful waiting in early prostate cancer.


Abstract

BACKGROUND: Radical prostatectomy reduces mortality among men with localized prostate cancer; however, important questions regarding long-term benefit remain.

METHODS: Between 1989 and 1999, we randomly assigned 695 men with early prostate cancer to watchful waiting or radical prostatectomy and followed them through the end of 2012. The primary end points in the Scandinavian Prostate Cancer Group Study Number 4 (SPCG-4) were death from any cause, death from prostate cancer, and the risk of metastases. Secondary end points included the initiation of androgen-deprivation therapy.

RESULTS: During 23.2 years of follow-up, 200 of 347 men in the surgery group and 247 of the 348 men in the watchful-waiting group died. Of the deaths, 63 in the surgery group and 99 in the watchful-waiting group were due to prostate cancer; the relative risk was 0.56 (95% confidence interval [CI], 0.41 to 0.77; P=0.001), and the absolute difference was 11.0 percentage points (95% CI, 4.5 to 17.5). The number needed to treat to prevent one death was 8. One man died after surgery in the radical-prostatectomy group. Androgen-deprivation therapy was used in fewer patients who underwent prostatectomy (a difference of 25.0 percentage points; 95% CI, 17.7 to 32.3). The benefit of surgery with respect to death from prostate cancer was largest in men younger than 65 years of age (relative risk, 0.45) and in those with intermediate-risk prostate cancer (relative risk, 0.38). However, radical prostatectomy was associated with a reduced risk of metastases among older men (relative risk, 0.68; P=0.04).

CONCLUSIONS: Extended follow-up confirmed a substantial reduction in mortality after radical prostatectomy; the number needed to treat to prevent one death continued to decrease when the treatment was modified according to age at diagnosis and tumor risk. A large proportion of long-term survivors in the watchful-waiting group have not required any palliative treatment. (Funded by the Swedish Cancer Society and others.).

Comment in


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