Surgery vs. Observation for Early-Stage Prostate Cancer

During median follow-up of 12.8 years, fewer deaths occurred among men who underwent radical prostatectomy than among those assigned to watchful waiting.

In a prior trial of 695 men with localized prostate cancer, investigators from the Scandinavian Prostate Cancer Group Study Number 4 showed that, during median follow-up of 10.8 years, patients randomized to radical prostatectomy had lower risk for mortality and metastases than those assigned to observation (JW Oncol Hematol Sep 16 2008). In that study, patients in the surgery group with local recurrence (palpable or histologically confirmed) received hormonal therapy. Those in the observation group with obstructive voiding disorders received transurethral resection, and those with metastases detected by bone scan received hormonal therapy.

Now, these investigators report that, after a median follow-up of 12.8 years, mortality was lower in the surgery group than in the observation group (47.8% vs. 57.8%; *P*=0.007). Also, disease-specific mortality was lower in the surgery group (cumulative incidence of death from prostate cancer at 15 years, 14.6% vs. 20.7%; relative risk, 0.62; *P*=0.01). The survival benefit noted in the original report was maintained and was confined to patients aged <65. The number needed to treat to avert one death was 15. Of note, among men who underwent radical prostatectomy, those with extracapsular tumor growth had a sevenfold higher risk for death from prostate cancer than those without extracapsular tumor growth.

Comment: In this well-executed study, additional follow-up continues to demonstrate a survival benefit for men aged <65 who undergo radical prostatectomy for localized prostate cancer. However, as noted by an editorialist, the newly appreciated survival benefit provided by radical prostatectomy in Scandinavian men with low-risk prostate cancer might not apply to men in the U.S. with low-risk, early-stage disease. In the current trial, 88% of the Scandinavian men had palpable tumors, and cancers were detected by screening in only 5.2% of patients. In contrast, <50% of U.S. men with newly diagnosed prostate cancer have palpable tumors, and most cancers are identified by screening.

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