Prostatectomy improves outcome of some men with prostate cancer over watchful waiting

August 12 2008

Men with early prostate cancer who undergo radical prostatectomy have a lower rate of death due to prostate cancer than men who are followed without treatment, known as watchful waiting, according to a randomized controlled trial published in the August 12 online issue of the *Journal of the National Cancer Institute*. The benefit from the surgery, with respect to prostate cancer death rates, remained constant beyond 10 years, but the overall death rates in the two groups were not statistically different. The applicability of the results to the current generation of prostate cancer patients is unclear, however, because few of the cancers treated in the trial were discovered by PSA (prostate-specific antigen) screening, a practice that is now widespread.

The Scandinavian Prostate Cancer Group launched the current trial in 1989 to examine the impact of radical prostatectomy on cancer-specific mortality relative to watchful waiting. In 2005, with a median follow-up 8.2 years, the researchers reported that men in the prostatectomy arm had lower rates of disease-specific mortality than those in the watchful waiting arm. The investigators were interested to know if the prostate cancer mortality difference would continue to increase with longer follow-up. Thus far, this is the only completed randomized trial comparing the two treatment options.

Lars Holmberg, M.D., of the Kings College Medical School in London and colleagues from Finland and Sweden continued to follow the men

for an additional three years.

With a median follow-up of 10.8 years, the cumulative incidence rate for prostate cancer death was 13.5 percent in the surgery arm and 19.5 percent in the watchful waiting arm, for an absolute reduction of 6 percent. The benefit, in terms of absolute risk reduction, did not increase after the first 10 years following treatment. For those patients followed at least 12 years, 12.5 percent of the men in the surgery group died due to prostate cancer compared with 17.9 percent of the men in the watchful waiting group, for an absolute reduction of 5.4 percent. Overall mortality at 12 years, however, was not statistically significantly different in the two arms at 32.7 percent and 38.5 percent, respectively.

"Contrary to our predictions based on shorter follow-up, the absolute difference in cumulative incidence of distant metastasis and prostate cancer death did not further increase after 7 years of follow-up," the authors write.

The authors note that it is not clear whether their data are applicable to men whose cancer is detected in the era of PSA screening because most of the men in their trial had palpable tumors at diagnosis. "In settings with a large proportion of PSA-detected tumors, the relative reduction in risk of death following radical prostatectomy might be somewhat larger or similar to that in our study, but the absolute reduction would be smaller," they write.

In an accompanying editorial, Timothy Wilt, M.D., of the Minneapolis VA Center for Chronic Disease Outcomes Research also raises that issue but concludes that the results are applicable to a subset of current prostate cancer patients. "These results demonstrate that among men younger than 65 years whose prostate cancer is detected by methods other than PSA testing (eg, due to a digital rectal examination to evaluate uri¬nary or other symptoms), cure with radical prostatectomy is

possi¬ble, may be necessary, and should generally be recommended," he writes.

He notes that the current trial is only the first in a series that are evaluating treatments for men with localized prostate cancer, and that at least one included patients whose tumors were discovered through PSA testing. These trials and trials testing options between these two extremes will be important in guiding prostate cancer care in the future.

Source: Journal of the National Cancer Institute