

## **Vasectomy and Cancer Risk**

Some studies have raised questions about a possible relationship between vasectomy (an operation to cut or tie off the two tubes that carry sperm out of the testicles) and the risk of developing cancer, particularly prostate and testicular cancer. Such a relationship, if proven, would be of importance because about 1 in 6 men over age 35 in the United States has had a vasectomy.

### **Prostate Cancer**

Prostate cancer is the most common cancer in American men and the second leading cause of cancer death in American men, after lung cancer. In March 1993, the National Institute of Child Health and Human Development (NICHD) convened a conference, cosponsored by the National Cancer Institute (NCI) and the National Institute of Diabetes and Digestive and Kidney Diseases, to clarify the available evidence on the relationship between vasectomy and prostate cancer. Scientists reviewed and carefully weighed all of the data available at that time, including results from published and unpublished studies.

They determined that the results of research on the association between vasectomy and prostate cancer were not consistent. In addition, the scientists could not find any convincing biological explanation for a link between vasectomy and an increased risk of prostate cancer.



Based on these findings, the expert panel concluded that even if having a vasectomy can increase a man's risk of developing prostate cancer, the increase in risk is relatively small.

In 1997, the NCI convened the prostate cancer Progress Review Group (PRG), a committee that included members from the scientific, medical, industrial, and advocacy communities. This group was charged with developing a national plan to outline scientific efforts involving prostate cancer research. The PRG's final report, published in August 1998, concluded that the evidence supporting a role for vasectomy in the development of prostate cancer is weak.

Researchers continue to investigate the possible relationship between vasectomy and prostate cancer. The majority of studies conducted thus far have upheld the conclusions made at the 1993 NICHD conference. Although a few studies have reported a link between vasectomy and prostate cancer, it is possible that other factors, including chance, may be responsible for the association suggested in these studies.

### **Testicular Cancer**

Testicular cancer is much less common than prostate cancer, accounting for approximately 1 percent of all cancers in American men. This type of cancer is most often found in men ages 15 to 35. A few studies have suggested a link between vasectomy and an increased risk of testicular cancer, but the evidence is inconsistent and the association in some studies may be due to factors other than vasectomy. It is also possible that the vasectomy procedure increases the rate at which an existing, but undetected, testicular cancer will progress. At this time, it is believed that there is either no association or a weak association between vasectomy

and testicular cancer, although more research is needed before definitive conclusions can be reached.

Men concerned about prostate cancer or testicular cancer should talk to their doctor about the symptoms to watch for and an appropriate schedule for checkups.

## References

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**Sources of National Cancer Institute Information**

**Cancer Information Service**

Toll-free: 1-800-4-CANCER (1-800-422-6237)

TTY (for deaf and hard of hearing callers): 1-800-332-8615

**NCI Online**

***Internet***

Use <http://cancer.gov> to reach the NCI's Web site.

***LiveHelp***

Cancer Information Specialists offer online assistance through the *LiveHelp* link on the NCI's Web site.

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