Second Primary Tumors after Prostate Carcinoma

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Précis: In this study, men with prostate cancer appeared to have a significantly lower rate of second cancer compared to age matched controls without a history of prostate cancer.

Introduction
Data regarding second primary tumor risk after diagnosis of prostate carcinoma are somewhat unclear. Some reports suggested an overall reduction of risk for all cancers after prostate cancer. However, others showed no significant difference in incidence of second primary tumors compared to the general population. In this report, Levi and associates have re-examined data regarding second primary tumors after a diagnosis of prostate carcinoma using the Van and Neuchâtel Cancer Registry datasets for the period 1974-1994.

Method
A total of 4503 cases of newly diagnosed prostate cancer were followed until the end of 1996. The expected number of tumors arising in the general population was calculated based on incidence rates adjusted for age and calendar year multiplied by the observed number of person-years at risk.

Results
- 380 second cancers were observed in patients with prostate cancer versus 534.1 expected.
- A reduction of second primary tumors in the number of tobacco and non-tobacco-related tumors was seen.
- The reduction in lung cancer cases appeared to be more significant among elderly men (age ≥ 75) and patients with a shorter time interval since diagnosis of their prostate cancer.

Discussion
Men with prostate cancer appeared to have a significantly lower rate of second cancer compared to age matched controls without a history of prostate cancer. Many factors may contribute to this observation, including misclassification between primary cancer and metastases, reduced medical surveillance in elderly men with prostate cancer, and perhaps behavior modifications after the diagnosis of prostate cancer.