

Risk of tobacco-related multiple primary cancers in Bavaria, Germany

Martin Radespiel-Tröger, Ulrike Braisch, Martin Meyer
Population-Based Cancer Registry Bavaria, Registration Office

Introduction

With the prospect of increasing prevalence of cancer, the issue of multiple primary cancers becomes more relevant. The aim of this study was to estimate the risk of developing a tobacco-related subsequent primary cancer (TRSPC) in persons with a tobacco-related first primary cancer (TRFPC) compared with the general population in Bavaria, Germany.

Methods

Using data from the Population-Based Cancer Registry Bavaria, we analyzed TRFPC and TRSPC diagnosed in Bavaria between 2002 and 2008 to estimate the relative and absolute risk of developing TRSPC using standardized incidence ratios (SIR) and excess absolute risks (EAR) [1].

Results

121,631 TRFPC in men and 75,886 respective cancers in women were registered, which in 2.5% of male and 1.2% of female cancer patients were followed by at least one TRSPC. In both males and females, the highest increased risks compared to the general population were found within the group of cancer in the mouth/pharynx, oesophagus, larynx, and lung/bronchus.

Discussion

With respect to cancer in the mouth/pharynx, oesophagus, larynx, lung/bronchus, kidney, urinary bladder and urinary tract, smoking was confirmed as a shared risk factor based on our finding of mutually significantly increased risks of TRSPC [2].

Summary

The results of this study illustrate the importance of smoking cessation and of continued follow-up care especially of smokers with the aforementioned TRFPC to detect TRSPC at an early stage [3].

References

- [1] Schoenberg BS, Myers MH. Statistical methods for studying multiple primary malignant neoplasms. *Cancer* 1977, 40:1892–1898.
- [2] SEER: New Malignancies Among Cancer Survivors. SEER Cancer Registries; 1973–2000. <http://seer.cancer.gov/publications/mpmono/index.html>
- [3] Braisch U, Meyer M, Radespiel-Tröger M. Risk of tobacco-related multiple primary cancers in Bavaria, Germany. *BMC Cancer* 2012, 12:250.

Martin Radespiel-Tröger
Population-Based Cancer Registry Bavaria, Registration Office
Östliche Stadtmauerstr. 30, 91054 Erlangen
Tel. +49-(0)9131-8536041, email: Martin.Radespiel-Troeger@ekr.med.uni-erlangen.de