Risk factor profile of patients with myocardial infarction: Smoking in younger patients

Authors: H. Theres, B. Maier, S. Behrens, R. Schoeller, H. Schühlen

Background: Besides age and sex, smoking, hypercholesterolemia, and hypertension are the main risk factors that promote the development of coronary artery disease and are included in prognostic scores for calculating coronary risk (ESC European guidelines on cardiovascular disease prevention). We have therefore analysed whether risk factor profiles for patients with myocardial infarction (MI) differ between ages and whether younger patients show these 3 risk factors more often

Methods: The Berlin Myocardial Infarction Registry collects data on hospital treatment of MI patients prospecticvely since 1999. Part of data collection is asking patients anamnestically for their risk factors. We examined 5 age groups with n=6009 with <55 yrs., n=6342 with 55-64 yrs., n=8214 with 65-74 yrs., n=6174 with 75-84 yrs. and n=2523 with >=85 yrs.

Results: The risk factor profile differed across ages, 76% of those <55 years were smokers and 94% of those <55 years had at least one of the three risk factors (fig.).

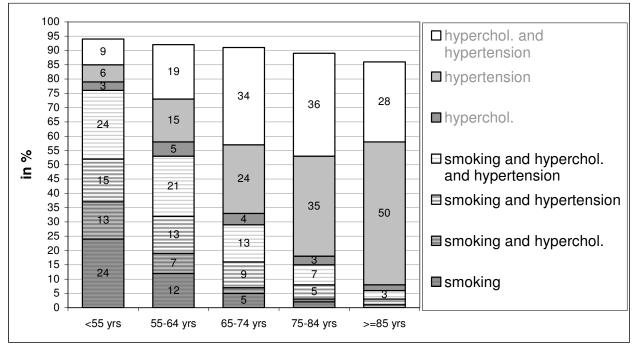


Figure: Risk factor profile according to age

Over time the risk factor profile in the age group <55 years remained almost the same: 1999-00: 76% smoked, 2001-02: 73%, 2003-04: 77%, 2005-06: 75%, 2007-2008: 77%, 2009-10: 74%, 2011-12: 76%. In the younger age group there was only a small difference between sexes, with 76% of men and 74% of women smoking.

Conclusions: Patients suffering from MI in the younger age group <55years were smokers in 76%. In our data, smoking became the most important risk factor for developing MI in younger years. Since 1999 the percentage of smokers in the younger age group <55years has not decreased.