ANATOMICAL LOCATION OF SCC TUMORS: TRENDS IN COASTAL AND INLAND AREAS IN SWEDEN

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Background and Aims: The incidence of squamous cell carcinoma (SCC) has increased, both in Sweden and worldwide. The aim was to investigate if there had been an increase in all anatomical sites and if there had been any changes in the anatomical distribution of the tumors. Another aim was to compare the incidence in geographic areas with different sun exposure.
Methods: Yearly data on SCC incidence for the period 1990-2005 were obtained from the Swedish Cancer Registry. The number of tumors on head/neck, arms/legs and trunk were available, together with the incidence (cases per 100 000 inhabitants) for each anatomical site. The investigated area was the southwest part of Sweden, divided into a coastal area (over 1700 sun hours per year) and an inland area (up to 1700 sun hours per year). The statistical analyses were made using Cochran-Armitage tests, chi-square tests and regression analysis.
Results: Preliminary results showed no change over time in the distribution of tumors (on head/neck, arms/legs and trunk). No difference could be found between the growth rates for the site-specific incidence series.
Among men on the coast we found a larger percent of head tumors than in the inland (72% vs 68%), whereas no significant differences were found for women. The incidence was found to be significantly higher on the coast, for both men and women (all three anatomical sites).
Conclusions: The proportion of tumors on head, on arms/legs and on trunk has been fairly constant over time. The similar growth rates for the three anatomical sites do indicate a general increase in tumors at all sites, reflecting a general increase in exposure.
For each of the three anatomical sites a higher incidence was found on the coast compared to the inland. This mirrors the higher exposure on the coast (more sun hours).
References:
Hussain SK, Sundquist J, Hemminki K. Incidence trends of squamous cell and rare skin cancers in the Swedish National Cancer Registry point to calendar year and age-dependent increase Journal of investigative dermatology 2010;130:1323-8
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