

Incidenza dei tumori naso-sinusali epiteliali ed attività lavorative in 100 casi diagnosticati in provincia di Brescia dal 1978 al 2002

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KEY WORDS

Epithelial naso-sinusal cancer incidence; occupational exposure

SUMMARY

«Epithelial naso-sinusal cancer incidence and the role of work in 100 cases diagnosed in the Province of Brescia (northern Italy), in the period 1978-2002». Background: Naso-sinusal cancers (NSC) cover a group of rare tumours in Italy for which the role of occupational risk has been established. The systematic survey of NSC in the province of Brescia made it possible to analyse the jobs of the cases occurring in the area. **Objectives:** The aims of the research were: estimation of epithelial NSC incidence both in the general population and among wood and leather workers, description of the frequency and type of occupational exposure to substances or manufacturing processes. **Methods:** The epithelial type cases were obtained from the Naso-sinusal Cancer Register (population-based) operating in the Province of Brescia since 1994. Work histories were obtained via a standardized questionnaire. **Results:** The annual incidence of epithelial NSC (for 100,000) in the entire population (1,090,000 inhabitants, ISTAT census 1991) from 1993 to 1997 and from 1998 to 2002 was nearly the same, 0.82 and 0.90 for men, 0.37 and 0.37 for women, respectively. The nasal cavity was the most affected anatomic site (45%) and squamous cell carcinoma was the most frequent histotype (44%) among the first 100 cases whose case histories were appropriate; in the ethmoidal sinus adenocarcinoma represented 62% of the cases; 25% of all cases were exposed to occupational carcinogens (list A) and particularly to wood dust (17%), even if only of softwood species (30%), and leather dusts (7%) especially in the shoe repair. The average latency period was 47 years (SD 7.4) and 44 years (SD 5.6) respectively; 71% of these epithelial NSC cases involved the ethmoid and 85% were adenocarcinomas. Only 1% of the cases was exposed to chromium and nickel and occurred in galvanization processes. Among the exposures to occupational risks with limited epidemiological evidence (list B) there was one case exposed to formaldehyde and 42 cases occurring in the building, agricultural, metallurgic and textile sectors. Thus all the exposures to occupational risks, both certain and probable (lists A and B) reached 84% among men and 17% among women. Epithelial NSC annual incidence rates (for 100,000) estimated among the wood and leather workers for the period 1985-2002 were 13 and 6.5 respectively. **Conclusion:** The results confirm the meaning of 'sentinel event' for these tumours in occupational health and justify maintaining an active surveillance programme for the cases occurring in the area.