SKIN CANCER (OTHER THAN MELANOMA)

ROLE OF OCCUPATIONAL VERSUS RECREATIONAL SUN EXPOSURE AS A RISK FACTOR FOR NON-MELANOMA SKIN CANCERS (NMSC)

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INTRODUCTION: Exposure to solar radiation is the most important external risk factor for non-melanoma skin cancer. Outdoor workers are at increased risk but the relationship of NMSC with occupational sun exposure is often confounded by concurrent exposure for leisure pursuits.

OBJECTIVE: To compare, the percentage of outdoor workers in NMSC Italian patients versus controls with no history of NMSC; to assess the amount of occupational versus recreational sun exposure in both groups, evaluating also other risk factors and the use of protective measures.

METHODS: Adult patients with one or more NMSCs were enrolled in Dermatology Departments of seven Italian University Hospitals. Subjects without a history of NMSC and without actinic keratoses were recruited as controls and matched with patients for sex and age range, with a 1:2 patient/control ratio, whenever possible. Data were collected by means of specifically designed questionnaires that were partly self-administered, partly completed by physicians.

RESULTS: 834 patients (males 62.1%, mean age 71.5) and 1563 controls (males 61%, mean age 70.4) were enrolled. A history of outdoor work was significantly (p=0.033) more frequent in patients than controls. Patients were significantly (p=0.012) more sun exposed

from outdoor leisure activities, such as sports or gardening, and sunbathed for longer periods (p=0.13). In outdoor workers, cumulative sun exposure for leisure did not differ between patients and controls, while the difference was significant (p<0.05) among indoor workers. Both patients and controls with a history of outdoor work were significantly more sun exposed at work than during leisure activities (p<0.001). As for photo-protection habits, the use of sunscreens by outdoor workers was very low, particularly at work (19.9%); patients used sunscreens significantly more than controls (p=0.002).

CONCLUSIONS: Occupational and recreational sun exposure are relevant risk factors for outdoor and indoor workers respectively. Sunscreens are alarmingly underused, particularly at work.