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INCIDENCE OF NON-MELANOMA SKIN CANCER IN KIDNEY TRANSPLANT RECIPIENTS. S Lovati, E Gotti, L Naldi Department of Dermatology and Nephrology, University of Milan, Bergamo, Italy

Renal-transplant recipients are known to have an increased incidence of skin cancer including squamous cell carcinoma and basal cell carcinoma.

All patients with a functioning graft, living in Bergamo and its province, who received a first renal transplant between 1972 and 1995 at the transplant-centres of Milano and Bergamo were eligible. A total of 298 patients (201 males and 97 females) were included in the study. The median age of these patients was 36 years; the median follow-up was 7 years. During the follow-up period 19 patients (17 males and 2 females) developed a skin cancer: 11 patients (10 males and 1 female) had a basal-cell carcinoma (BCC), 5 patients (4 males and 1 female) a squamous-cell carcinoma (SCC), one patient (male) had multiple BCC, one patient (male) multiple SCC and one patient (male) had a combination of BCC and SCC. The ratio of basal-cell carcinoma to squamous-cell carcinoma (BCC/SCC) was 1.8. The median age of the renal-transplant recipients who developed skin cancer was 52 years (range 42 to 64 years) and the median interval from transplantation to the diagnosis of the first cancer was 7 years (range 1 to 20 years) for BCC and 10 years (range 2 to 20 years) for SCC. Seven BCC and four SCC were located on the face, four BCC were located on the trunk, one BCC and three SCC were located on the limbs. The overall incidence of both types of skin cancer was 10 cases per 1000 post-transplant person years.

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PRACTICES AND AWARENESS OF PARTICIPANTS AT A SKIN CANCER SCREENING. Amy J. McMichael and Sharon Jackson*., Departments of Dermatology and Public Health Sciences*, Bowman Gray School of Medicine of Wake Forest University, Winston-Salem, North Carolina, U.S.A.

For many years, dermatologists in the U.S. have provided skin cancer screenings to the community to try to decrease both incidence and mortality of skin cancers. Recently, some authors have questioned the worth of these screenings both as ways to increase awareness of skin cancer or to bring in those who are most at risk. In this study, we examined the patient population attending our yearly skin cancer screening to determine the level of skin cancer awareness, potential yield of the screening, and demographics of the patients attending the screening. These factors were used to define characteristics common to those attending the screening and to define where increased education about screenings may improve skin cancer screening attendance and with it, skin cancer awareness.

In May 1995, a questionnaire was distributed to the first 110 patients to arrive for the yearly free skin cancer screening at our institution. The 21-question self-administered questionnaire included questions on demographic characteristics, most successful modes of advertisement, and skin cancer awareness. The 100 patients who completed the survey were compared to the total 244 patients screened to insure that the populations did not differ significantly. More women (65%) than men (35%) completed the survey. Average years of education ranged from 0 to 22 (mean 12 ± 6 years). Ninety seven patients (98%) in our sample had some kind of insurance coverage. Most patients heard about the screening via the newspaper (34%) or television (17%). Only 2% heard about the screening through a physician. Seventy nine percent of our sample knew that melanoma is the most serious form of skin cancer. Only 44% of our sample knew that a family history of skin cancer was a risk factor for development of skin cancer. Five probable skin cancers and 15 pre-malignant lesions were documented on the 100 patients who completed the questionnaire.

Our findings demonstrate that we evaluated few low education level, uninsured patients in our screening. Therefore, it may be helpful to target these individuals in future skin cancer screenings. Newspaper and television were the most reported modes of advertisements by participants suggesting a role for increased advertisement using effective media. Because there were so few physician referrals to the screening, our findings also suggest a role for the non-dermatologist physician in encouraging patient participation.

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EFFECT OF UVR AND HOST CHARACTERISTICS ON RISK OF SKIN CANCER. T. Moon and Q. Dong, Department of Biomathematics, U.T. M.D. Anderson Cancer Center, Houston, TX

We performed a population-based case-control study in Arizona to evaluate the effect of UVR exposure on relative risk of skin cancer [melanoma, squamous cell carcinoma (SCC), and basal cell carcinoma (BCC)] development and the attributable proportion of skin cancer cases caused by subject characteristics. 156 melanoma and 804 SCC or BCC patients (all first diagnoses) and 738 control subjects were included in the study. UVR exposure was assessed according to four measures: intensity of light exposure, duration of residence in Arizona, prior treatment of actinic keratosis (ak), and average amount of sun exposure. Susceptibility characteristics included number of freckles currently on the arms. Use of sunscreen was assessed both in the year prior to the interview and 1 to 10 years before the interview. Data were analyzed by logistic regression modeling. Residential duration, prior treatment of ak, and average sun exposure were associated with risk for melanoma. Prior intense light exposure, residential duration, and prior treatment for ak were significantly associated with risk for SCC. All four of the UVR exposure characteristics were associated with risk for BCC. Current freckle count was associated with melanoma and SCC and suggestive of BCC. The combination of UVR exposure, susceptibility, behavior, and demographic characteristics increased the summary attributable proportion to 0.94 for melanoma with SCC and BCC having values of 1.00. Several measures of UVR exposure adjusted for multiple susceptibility, behavior, and host characteristics may be necessary in classifying individuals at high, moderate, and low risk for skin cancer. Long-term sunscreen use was protective for all types of skin cancer.

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TANNING SALONS : A SURVEY ON USE, MOTIVATIONS, RISK PERCEPTIONS AND SIDE EFFECTS IN QUEBEC. M. Rhainds[1], J. Claveau[1], L. De Guire[2], F. Ouellet[1], A. Daveluy[3]. [1]Centre de santé publique et Département de dermatologie, Centre Hospitalier Universitaire de Québec (Pavillon CHUL), Québec, Canada [2]Département de santé publique, Montréal-Centre [3]Ministère de la Santé, Québec.

Commercial tanning salons are very popular in North America and users are found in increasing numbers. For most people who wants to tan, tanning parlors represent an easily accessible source of ultraviolet radiation (UVR), especially under northern latitudes (Quebec, Canada). This survey was undertaken to estimate the percentage of men and women who visited tanning facilities during the last five years, during the last year and to characterize tanning bed users.

In March 1996, a telephone survey was carried out among 2086 adults living in the two most densely populated regions of Quebec. Interviewers used a standardized questionnaire to document exposure habits to artificial UVR sources, motivations, risk perceptions and adverse events associated to tanning bed use. The final sample included 1003 adults aged 18 to 60 years old.

The proportion of respondents who used a commercial tanning bed during the previous five years was 20.2 %. Also, 10.9 % of the sample declared having used a tanning bed during the last 12 months. Less than 1 % used tanning equipment at home. The percentage of user was higher among women than men both during last five years (F : 23.7 %; M : 15.3 %) and during last year (F : 12.8 %; M : 8.6 %). The prevalence rate of tanning bed use decreased with age (18-34 y : 31.7 %; 35-44 y : 18.5 %; 45-54 y : 9.5 %; 55-60 y : 5.9 %). The commonest reason given for using tanning beds was to improve their appearance by a tan (56.7 %). Other motivations included to acquire a protective pre-vacation tan (27.6 %), to relax (11.8 %) and to have a healthy skin (10.8 %). Twenty-six percent of tanning bed users experienced one or more side effects after a visit to tanning salons [skin burn (15.8 %), dry skin (8.4 %), other skin problems (4.4 %), eye symptoms (2.5 %)]. The main reasons motivating the avoidance of artificial UVR sources during last five years were : tanning salons are dangerous for the skin (42.0 %), preference for the sun (21.9 %) and no desire to tan (16.9 %). The intention to return during the next year to tanning salons was very high among last year users (77.5 %).

These results suggest that tanning bed use is a very prevalent behaviour in the Quebec population, particularly among young women. The high rate of adverse effects reported by tanning bed users is of concern, especially skin burns which are a known risk factor of cutaneous malignant melanoma. This study underlines the importance of educating the population in order to change attitudes and beliefs regarding tanning bed use.

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OCCUPATIONAL DERMATITIS CAUSING LOST WORK DAYS Carol Burnett, Boris Lushniak, William McCarthy, Joel Kaufman, National Institute for Occupational Safety and Health, Cincinnati, OH

This report describes cases of occupational dermatitis cases severe enough to cause days away from work using data from the Bureau of Labor Statistics' (BLS) Annual Survey of Occupational Injuries and Illnesses.

The BLS survey collects employer reports from about 250,000 private industry establishments each year. Descriptive data on the cases and characteristics of the illnesses are collected on a sample of the cases that result in days away from work. National estimates of the number of cases and days away from work were calculated for industries, occupations, and dermatitis sources. Incidence rates were calculated for industries.

In 1993 there were an estimated 60,200 cases of occupationally related skin diseases or disorders for a rate of 7.6 per 10,000 workers. Of these, 12,613 cases were severe enough to result in one or more days away from work, with a rate of 1.6 per 10,000. Dermatitis accounted for 70% of this broad category, with 8,835 cases and a rate of 1.16 per 10,000 workers. The largest number of cases was reported for the service industry (N=3021); the highest rate was in agriculture, forestry, and fishing (4.25/10,000). The occupations with the largest number of cases were non-construction laborers (N=541) and miscellaneous food preparation (N=473). Cleaning agents caused the largest number of cases (N=1303), followed by poison ivy/oak/sumac (N=1228). While the median number of days away from work for dermatitis cases were three, calcium hydroxide and oxides, including cement mortar and lime, caused dermatoses which resulted in a median nine days away from work; 27% of these cases had more than 20 days away.

The BLS survey data show that the impact of occupational dermatitis is significant. Since the prognosis of dermatitis may be poor, prevention is of great importance. The identification of industries with high incidence of occupational dermatitis causing days away from work and the descriptive information on the cases could lead to targeted intervention and prevention measures resulting in lowered incidence of disease.

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RISK FACTORS OF LEG ERYSIPELA : A MULTICENTRIC CASE-CONTROL STUDY. Alain Dupuy, Hakima Benchikhi, Sylvie Bastuji-Garin, Phuong May Dang, Bruno Sassolas, Olivier Chosidow, Loïc Vaillant, Jean-Claude Guillaume, Jean-Jacques Grob, Jean-Claude Roujeau, Réseau dEpidémiologie en Dermatologie, Département de Santé Publique. Hôpital Henri Mondor, Université Paris XII, Créteil, France

Erysipela is a common infectious dermatologic condition most often occurring in the legs. Many local or systemic predisposing factors have been suspected from clinical experience. A controlled study was conducted in order to evaluate these factors and to examine their , inter-relationships.

A multicentric case-control study was conducted in six hospitals in France from May 1995 to September 30, 1996. Cases were patients hospitalized for a leg erysipela (defined as an acute inflammation of the leg with temperatutre over 38°C). Controls were patients from the same hospital with acute conditions (trauma, surgery...). Because most suspected factors (e.g. leg ulcers, tinea pedis, venous insufficiency) have a high prevalence, the sample size was calculated as 150 cases with 2 matched controls for each case. A total of 152 cases and 262 controls matched for age and gender were prospectively enrolled. Cases and controls were administered a standardized questionnaire and had a clinical examination regarding the following factors : obesity, diabetes mellitus, tobacco and alcohol use, standing position at work, past history of leg injury (thrombophlebitis, surgery, neurologic condition, radiotherapy), presence of leg edema, lymphedema, venous insufficiency, arteritis, presence or past history of leg ulcer, recent or chronic wound, tinea pedis, and other chronic dermatologic condition of inferior limbs. A univariate analysis will be conducted on Epi-Info 6.0 (CDC, Atlanta). The appropriate factors will be studied through multivariate analysis using logistic regression (BMDP, University of California, Berkeley).

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