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Cutaneous lupus erythematosus and cancer risk

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ORIGINAL ARTICLE, p 1053

Although well known since the late 19th century, cutaneous lupus erythematosus (CLE) and its various subsets are still an underestimated group of skin diseases. Associations with systemic disease and internal organ involvement have variably been described by several authors in the past. Although one-third of patients with systemic lupus erythematosus (SLE) show primary manifestations on the skin and two-thirds will show skin manifestations at any time during their disease course, characteristic dermal symptoms may be missing in many cases. On the other side, distinct disease entities as known in dermatology may lack any or severe internal involvement. While at least three different subsets of CLE (acute CLE, subacute CLE, chronic CLE) are dermatologically well defined, these are only partly appreciated among rheumatologists and may give rise to misunderstanding in the clinical routine as well as within therapeutic studies. However, increasing scientific work has been invested in pathogenic as well as clinical studies. With regard to the rarity of some disease subsets and with new diagnostic and activity scores at hand, registries have been established over Europe and the U.S.A. Eventually, epidemiological and clinical data of CLE will be clarified which will help in caring for the patients and in stopping mutilation and the ensuing distinct decrease of life quality.

Within this context, in a Swedish study published in the current issue of the *BJD*, Grönhagen *et al.*¹ present data on the incidence of cancer in patients with CLE in a population-based study explicitly excluding patients with SLE. Chronic inflammation has long been connected with an increased cancer rate in many diseases, although the direct pathogenic traits are still to be detected and may be altogether heterogeneous. Studying almost 4000 patients, the authors found an overall increased cancer risk of 1.8 and a fourfold increase for buccal cancer, lymphoma, respiratory cancer and nonmelanoma skin cancer. The basis for this study is the National Swedish Patient Register which collects any inpatient discharges since 1987 on a disease code base as well as outpatient data since 2001. Thus well above 80% coverage of patients is accomplished and gives the unique chance to monitor epidemiological data on a comprehensive basis. Despite possible peculiarities of the Swedish as compared with other populations and the reliability of clinical data collected without a strict protocol, this study is one of the most comprehensive and well founded among those published so far. The consequences for the

everyday clinical work with regard to counselling and specialized monitoring of patients with CLE are evident. This study is among a row of publications on epidemiological data of CLE from the same Swedish co-workers which will make us expect more studies to come on other aspects of this group of skin diseases.

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Conflicts of interest

None declared.

Reference

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Reporting and registering nonmelanoma skin cancers: a compelling public health need

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Nonmelanoma skin cancer (NMSC) is the most commonly diagnosed cancer in Europe, the U.S.A. and Australia, among others.^{1–3} In many of these countries, the sheer volume of new cases and high rates of multiple recurrences make it one of the costliest cancers.^{4–6} NMSC cuts a wide swath across many sectors of society. With at least one in five Americans receiving a diagnosis of NMSC during their lifetime,⁷ this cancer likely affects those with well-known and established risk factors as well as average-risk individuals. Rates continue to rise in elderly populations, although NMSC is now more commonly diagnosed in historically lower-risk younger persons, probably attributed at least in part to tanning bed use.^{8,9} Studies in special populations such as childhood cancer survivors¹⁰ and transplant patients¹¹ reveal striking and dramatic reports of near-epidemic proportions of NMSC.

Lomas *et al.*¹² should be commended for their expert and systematic review of the worldwide incidence of NMSC. In particular, they used strong and tight criteria, which provides near-optimal internal and external validity, establishing a new standard for subsequent similar reviews. Establishing a new international benchmark from numerous registries will be an important outgrowth of their systematic review. The data are

very timely as the economic burden of NMSC in an ageing population is at hand. Many European registries report annual increases of 5–6% per year, whereas many registries in Australia note recent trends of plateauing cases of NMSC.¹² While it is premature to generate significant conclusions regarding these incidence trends, it is possible that long-standing nationwide prevention activities in Australia¹³ may be contributing to this unanticipated finding.

Lomas *et al.* report the new initiatives from the National Institute for Health and Clinical Excellence (NICE) guidelines that truly address the burden of NMSC in the U.K. NICE guidelines¹⁴ reveal that the current annual number of basal cell carcinomas (BCCs) is probably closer to 55 000–60 000, surpassing official estimates of 48 000 per year. This gap may be explained by the fact that most U.K. cancer registries do not register multiple BCCs in the same individual. For example, it is estimated that 44% of residents of Scotland have a recurrent BCC within 3 years of their first BCC. Moreover, not all BCCs are submitted for histology, with one estimate indicating that up to 50% of general practitioners who remove suspected BCCs never submit them for histology.¹⁴

Collecting an accurate number of NMSCs from doctors' offices, private settings and hospitals is akin to 'herding cats', and anticancer organizations and cancer control authorities have played little role to date in promoting an organized and dedicated approach for obtaining an accurate NMSC count. While an accurate count could provide much needed information on the true burden of NMSC, far more added value could be realized. A dedicated population-based registry of NMSC cases would enable matching of the network of transplant registries and childhood cancer survivor cohorts in Europe and the U.S.A. Currently, such matches rely on patient self-report and an unwieldy process that often requires layers of bureaucracy to obtain pathology reports. Strikingly, with a recent meta-analysis finding an estimated 12% increased overall risk for subsequent cancers for individuals first diagnosed with BCC (compared with those without prior BCCs),¹⁵ population-based registries could play an invaluable role for clinicians and epidemiologists searching for potential predictive markers for the development of subsequent cancers. The absence of an official count of NMSCs also precludes measuring the real effect of the tanning bed epidemic that has plagued much of Europe and the U.S.A. Finally, accurate counts reflecting the toll of NMSC on individuals could help to determine the impact of sun-protection programmes throughout Europe, the U.S.A. and Australia.

Where registration of NMSC does not occur, dedicated funding should be provided to incorporate mandatory registration. Where registration at the local, state or Federal level is a statute or regulation, funding should be provided to assist registrars in the collection of histology data from physicians' offices and hospitals alike. The results from this study suggest a compelling need to convene epidemiologists, dermatologists, health services researchers and registrars to pilot a full registry system in two to three countries, and the U.K. or U.S.A. would be an ideal place to start. Whether there is a financial

return on investment is questionable and potentially evaluable. It defies logic that cancer control authorities and public health officials can barely estimate the real and accurate burden of disease for the most common cancer in the industrialized world. Lomas *et al.* have described the burden of NMSC, and provided us with baseline values and the impetus to seek new and creative solutions to measuring the disproportionate burden of this disease.

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