

## In this issue...

### Does *Demodex folliculorum* play a role in perioral dermatitis?

*Demodex (D) folliculorum*, although present in normal skin, is usually considered playing a pathogenic role when it multiplies and when it penetrates the dermis. With the Standardized Skin Surface Biopsy (SSSB), the density of the mite is  $\leq 5D/cm^2$  in normal skin, when it is from 8 to  $36 D/cm^2$  in papulopustular rosacea.<sup>1-3</sup>

It would indeed be very interesting to know the *D. folliculorum* density (Dd) in each kind of facial dermatosis; towards this perspective, the study of Dr Dolenc-Voljč *et al* (p. 211) opens up the way to future investigations: they chose the SSSB to investigate the Dd in perioral dermatitis (PD). The value of Dd of their control group is the same as in previous studies ( $0.7D/cm^2$ ,  $< 5D/cm^2$ ), which confirms that SSSB enables comparisons to be made by different investigators. Today, SSSB appears to be the most appropriate method to measure Dd: it is non-invasive, accurate, reproducible, and enables analysis of an important part of the *D. folliculorum* biotope (the sample is large ( $1 cm^2$ ) and deep (infundibula)). Dr Dolenc-Voljč *et al* observed a higher Dd in PD only when the patients were treated with topical steroids: PD seems therefore not related to *D. folliculorum* proliferation. Moreover, topical steroids seem to induce a local immunosuppression which could favour a secondary Demodex proliferation, which was already suggested by other studies.

Nevertheless, it could be hypothesized that topical steroids could improve the quality of the sample, and reduce the number of false negative results, by, for example, reducing the layer of horny scraps and increasing the adherence of the lamina to the skin; in this case, the observed difference between treated and non treated patients could be explained by a bias in the method rather than by a real difference of Dd between the groups. So, before to give a definite conclusion on the role of *D. folliculorum* in PD, it would be interesting to exclude this hypothesis, by taking all possible measures to avoid the false negative results:

- to perform a second SSSB at the same place when the first one was negative,
- to clean initially the slide and the patient's skin with ether before performing the SSSB, to improve and to standardize the adherence.

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2. Forton F, et al. Density of Demodex folliculorum in rosacea: a case control study using standardized skin surface biopsy. *Br J Dermatol* 1993; 128: 650-9.
3. Forton F, et al. Demodicosis and rosacea: epidemiology and significance in daily dermatologic practice. *J Am Acad Dermatol* 2005 Jan; 52: 74-87.

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### Atopic dermatitis incidence after the hausse period?

One of the most intriguing questions in dermatology concerns the steady increase in atopic dermatitis (AD). Several population-based investigations from industrialized countries demonstrated that AD increased from a 3-5% prevalence around 1960 to a prevalence of 10% in the early 70s and of 15-20% in 1990 (1, 2). Dr. Olesen and coworkers (p. 244) now present for the first time that AD incidence in industrialized countries may have reached a plateau. It is a follow-up study of previously generated data e.g. demonstrating an inverse correlation of AD and insulin-dependent diabetes mellitus (3). In the present manuscript, the authors investigated whether the incidence of AD increased during the 1990s as determined by analysis of questionnaire data. The cumulative incidence of AD in children at the age of 7 was 18.9% in 1993 and 19.6% in 1998 indicating that AD incidence was stable in Danish children. Even though only a relatively short observation period was investigated (5 years), this study demonstrates first evidence of a general feeling that the raise of AD prevalence may have come to an end. What are the reasons for this "saturation"? As discussed by the authors, the genetic susceptibility may have been reached (~20%) or a migration bias may have arrived at a plateau. However, as Hywel Williams already stated in 1992, several other factors may be contributing to increased AD prevalence (4). Therefore, stable incidence of AD may also indicate that investigators' and parents' awareness of AD are now maximal in the so-called developed countries. Independently of that, standardized definition and measurement of AD in an epidemiological study applying the identical questionnaire to two large consecutive Danish birth cohorts rules out inter-study variations and therefore the conclusion of this study is especially valuable.

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2. Schultz Larsen F, Diepgen T, Svensson A. The occurrence of atopic dermatitis in north Europe: an international questionnaire study. *J Am Acad Dermatol* 1996; 34: 760-764.
3. Olesen AB, Juul S, Birkebaek N, Thestrup-Pedersen K. Association between atopic dermatitis and insulin-dependent diabetes mellitus: a case-control study. *Lancet* 2001; 357: 1749-1752.
4. Williams HC. Is the prevalence of atopic dermatitis increasing? *Clin Exp Dermatol* 1992; 17: 385-391.

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