

Short Communication

Computer applications in contact allergy

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The diagnosis and treatment of contact allergy require much information that a computer can supply. There have been several stages of development of a complete microcomputer (IBM-compatible PC) service for dermatologists in our department.

- 1978: Computerization of contact allergy information started on the mainframe computer of the Universitair Rekencentrum of the KU Leuven.
- 1988: Development of the expert system on the IBM 9370 computer of the Department of Dermatology.
- 1992: Development of DOS applications for dermatologists.
- 1996: Development of applications for Windows.

These applications are all available in Dutch, French, and English:

- CODEX, the Contact Dermatitis Index, for microcomputer under DOS has been available since 1992. A Windows version was developed in 1996. CODEX consists of a database of all the topical pharmaceutical products available in Belgium and their ingredients. The most important functions of CODEX are to generate exposure lists of products the sensitized patient must avoid and to provide therapeutic advice. CODEX is sponsored by Janssen-Cilag. It is updated annually.
- COSME, the Cosmetic Index, was developed in 1995. In 1996, the first Windows version was issued. The program generates positive lists of cosmetic products that the contact-allergic patient can safely use. After listing the allergens to be avoided, the dermatologist indicates the product categories: skin cleansers, skin care, make-up, etc. Additional characteristics or parameters can be specified, such as sex, hair type, and skin type. COSME is sponsored by the cosmetics industry. The users are issued an update 2× a year.
- INFAL, Information on Allergens, was created in 1996 for Windows. On the basis of localizations, occupations, and products, INFAL gives the related allergens with explanatory texts and images. Information is given for each allergen and also on a number of selected

topics. Biannual updates are planned. INFAL is sponsored by Schering-Plough.

- CDREF, Contact Dermatitis Literature References, is a new application (1997) under Windows, developed in collaboration with Dr. Luis Condé-Salazar in Madrid. CDREF provides literature references indexed by key words in English. It covers the last 30 years of the *Contact Dermatitis Newsletter*, *Contact Dermatitis*, and the *American Journal of Contact Dermatitis*. References from *La Lettre du Gerda* and *Dermatosen in Beruf und Umwelt* are included from 1996 on. OR and AND operators can be used, and lists of references can be printed out. Biannual updates will be issued. CDREF is sponsored by Yamanouchi.
- CFDLR, Patient Information Folders, developed in 1997, enables the dermatologist to give information to his or her patient on allergens. In addition, he or she can design special information sheets. Supplements will be sent once a year. CFDLR is sponsored by DERMAT.
- CDESK, for CD Desk, will combine the list functions of CODEX, COSME, and DFLDR. The dermatologist will be able to select the allergens of the patient and have the appropriate lists generated automatically. This application is scheduled for release in 1998.
- EXPCA is a complete software package that is being developed for the contact allergy clinic. It will include patient management (including anamnesis and patch-test data), the definition of test series, the addition of other potential allergens to be tested, and statistical processing of the patient data. Advice on the execution of the patch tests will be available. On the basis of the results obtained at the Contact Allergy Clinic of the Katholieke Universiteit Leuven, a subprogram will recommend the material to be tested as a function of a number of parameters. EXPCA is sponsored by the UCB Institute of Allergy and is scheduled for release in 1998.

As of July 1997, the most important programs, CODEX, COSME, and INFAL, are being used by about 500 dermatologists. The authors of this article can be contacted (fax: 32/16/33 70 12) for further information about 1 or more of these programs.