Rapport between the physician and AD patients (or their parents if they are children) is sometimes difficult as psychological factors, superimposed on the skin disease, can make them very demanding patients who expect the physician to cure their severe pruritus and the inflammatory changes. In addition, past therapeutic failures may have led them to adopt an indifferent or even a sceptical attitude towards their physician, in whom they may even totally have lost all confidence. Thus, physicians caring for AD patients do well to have a sound practical training in psychology to help them to manage these patients effectively.

Many details of the management of AD, and particularly dietary measures, have already been discussed in the predicting chapter on prophylaxis. An evaluation of the more important therapeutic results achieved up to recent years follows.

12.1 Specific and Immunological Therapy

To influence the course of AD by specific therapy has been a long-standing ambition of clinicians. Just how hyposensitization (desensitization) works in respiratory atopies is not fully understood; however, provided that the relevant allergen is used in adequate concentration, it is found that after the initial phase in a course of hyposensitization, when injections of the antigen are frequent, the serum IgE level is initially elevated but later decreases during the period of long-term hyposensitization (Berg and Johansson 1971; Johansson et al. 1972). This is an agreement with earlier studies based on biological titration using passive transfer techniques, which demonstrated an initial increase and a subsequent decrease in circulating reagins (Cooke et al. 1935; Sherman et al. 1939).

These findings led to the concept of blocking antibodies which act against reagins (IgE). There is some evidence that such blocking antibodies exist; however, despite a suspicion that they correspond to a certain subclass of IgG antibodies, their nature remains unknown. Equally obscure is the exact correlation between these blocking antibodies and IgE. Some authors believed that, as there is insufficient correlation between the clinical effects of hyposensitization and the serum levels of blocking antibody, the latter plays no great role in the former (Lichtenstein et al. 1968). More recent studies on the mechanism of spe-
cific therapy implicate not only IgG antibodies (Prahl et al. 1981) but also the generation of antigen-specific T suppressor cells (Canonica et al. 1979; Rocklin et al. 1980; Tamir et al. 1987). Furthermore, induction of anti-idiotypic antibodies and a decrease in mediator releaseability is under debate. Several clinicians have studied the effects of hyposensitization in these cases, using more or less reliable criteria, and it is characteristic that Becker (1932), who was one of the first to report on this method, was already critical of this effectiveness. A large number of dermatologists and allergologists who subsequently have evaluated this method in AD patients, have produced reports which have ranged from enthusiastic to sceptical; relatively favorable results have been achieved by the use of inhalants, whereas success has been rare when employing the subcutaneous or peroral routes for food hyposensitization. Studies in which results were subjected to critical analysis showed that a temporary or quantitative effect of hyposensitization could be achieved in only a minority of treated cases (Nexmand 1948); for example no difference was found in mold-sensitive AD patients whether they were “hyposensitized” with the relevant allergen or with a placebo (Rajka, unpublished observations). Thus the generally disappointing response to hyposensitization in AD is keeping with the inadequate theoretical basis mentioned already, but this does not mean that in certain AD cases, with a proven reaginic background, hyposensitization can a priori be expected to be valueless. Thus favorable results were seen in 15 carefully selected cases (Di Prisco de Fuenmayor and Champion 1979), in 8 of 50 cases (Korossy 1980), in nine mite-positive patients (Zacharïë et al. 1980), and furthermore in two monozygotic twins treated over 2 years (Ring 1982). It is, however, inadvisable to extrapolate these few beneficial results to be the majority of “pure” AD patients, but with purified allergens (semidepot, tyrosine-adsorbed vaccines or modified allergens: allergoids) and better methods of evaluating the results, the possibility of specific therapy should not be totally overlooked. On the other hand, patients who have AD combined with asthma and/or atopic rhinitis often derive considerable benefit from specific hyposensitization as far as their respiratory symptoms are concerned and this sometimes includes the skin condition (Bergquist and Nilzén 1972; Jarisch et al. 1979; Seidenari et al. 1986).

Of other immunological methods, the result of attempted immune stimulation by levamisole was disappointing (Alomar et al. 1978). In another study, the clinical condition, as well as the immunological parameters, improved (Jarisch et al. 1979). Transfer factor was applied in some severe cases. In general only slight benefit was registered, while the immunological values sometimes showed improvement (Strannegård et al. 1975; Hovmark and Ekre 1978; Zacharië et al. 1980). A suppressor cell increase was observed after giving dialyzable leukocyte extract, which contains, among other things, transfer factor (Herlin et al. 1981). In two severe AD cases leukopheresis was carried out in our clinic without lasting benefit but with some improvement of the impaired immune parameters (Amundsen, unpublished observations). Similarly, a short effect was seen using plasma separation (Nielsen et al. 1984). On the other hand, thymopoietin pentapeptide had a beneficial effect on clinical and immunological parameters in a double-blind trial in 18 AD patients (Kang et al.