

*The Atopic Dermatitis Files*

## Atopic Dermatitis in adults

Atopic dermatitis does not only affect children. Although it almost always appears during early childhood and often before the age of two, it does not always disappear before adolescence or adulthood. It is estimated that some 10% of patients continue to suffer from eczema as adults. In some cases this eczema is a cause for worry and can bring about complicated problems<sup>1,2</sup>.

Atopic dermatitis in adults is often a serious condition. It involves chronic, red, thick, lichenified plaques, sometimes with isolated pruritic papules. In addition to this chronic eczema, patients experience acute, vesicular or oozing flare-ups. Pruritus is always intense, with knock-on effects on daily life, morale, sleep and activity. In adults, the disease affects different areas of the body compared to infantile manifestations. The hands, face and especially the eyelids are most often involved, as well as large skin folds and sometimes other areas. Inflammatory flare-ups can affect skin all over the body. This is called erythroderma. These widespread conditions are serious, and can become more complicated when infections and metabolic disorders develop. They require hospitalization.

### Is this really atopic dermatitis?

In cases of adult eczema, we must determine whether it is a case of atopic dermatitis, another type of eczema or even a dermatose resembling eczema.

If the disease dates back to childhood, is combined with atopic respiratory symptoms or even digestive allergies, and is clinically typical (chronic thick, lichenified eczema, sometimes with oozing flare-ups), then the diagnosis can be considered definitive.

However, if the onset was recent, with atypical clinical signs, then another dermatosis should be considered (contact eczema, scabies, lymphoma, etc.). A skin biopsy would be useful in confirming eczema, with IgE dosage and contact tests to rule out allergic contact eczema. We will discuss this in more detail.

## Irritants

Atopic skin is particularly sensitive, and seemingly ordinary stimuli can trigger itching and eczema flare-ups. This is the case with irritants, i.e. certain cleansing or skin care products like ordinary soaps or disinfectants. It is recommended to use only products made for atopic, dry or sensitive skin, and to test skin tolerance yourself. You can do this by using the product in one small area at first. There are also individual variations that cannot be anticipated.

Careful selection of clothing, detergents and additives is essential. Wool turtleneck sweaters are classic itch-starters. Using softeners is recommended, as well as thoroughly rinsing clothes after washing.

## Contact allergies

When atopic dermatitis does not react favourably to treatment, any additional allergic contact eczema should be investigated.

This is a difficult diagnosis, since contact eczema can go unnoticed in patients with chronic eczema. It is, however, a cost-effective diagnosis, since eliminating the root of the contact allergy improves the eczema.

The main causes of allergic contact eczema are:

- Nickel contained in costume jewellery, glasses frames; cell phones in particular;
- Preservatives, (especially isothiazolinones) wipes, cosmetics, cleansing products;
- More rarely, other cosmetic ingredients such as fragrances or some sun filters;
- Essential oils found in some cosmetics described as "organic", which is certainly no guarantee of hypoallergenicity;
- Clothing, in rare cases;
- Shoes (chrome-tanned leather, glues).
- Even topical corticosteroids can be allergenic, and this is a particularly misleading type of allergy.

When a contact allergy is suspected, patch tests should be performed. A positive patch test will identify the substance responsible for allergic contact eczema, without fail. But asking questions, eliminating and then reintroducing the substance can also prove quite successful.

## Infections

Atopic dermatitis maintains a specific link with the microbes that colonize the skin, which is called the microbiota. Oozing eczema causes a rupture in the normal balance between harmless bacteria (commensal) and pathogenic bacteria.

Golden staph bacteria cause infections and are also linked to inflammatory flare-ups, even if there is no clinical secondary infection. Anti-infection measures are thus often indicated.

Herpes virus infection is often especially severe in persons with atopy, forming pustules and sometimes leaving varicelliform or even varioliform scars.

### A special case: "head and neck" dermatitis.

In adults with atopy, we have singled out a specific form of eczema, which exclusively or primarily affects the face and neck.

In cases of "head and neck" atopic dermatitis, you must search for photosensitivity, which is rare in atopic dermatitis (on the contrary, the sun is often beneficial) but which occurs at times: photosensitization induced by certain medicines (anti-histamines) is also something to watch out for. You can also search for an infection by a yeast such as *Malassezia*, and implement an anti-fungal treatment if necessary.

### Has the treatment been completed correctly?

We know that the standard atopic dermatitis treatment includes:

- gentle cleansing methods
- a daily emollient treatment, of considerable importance (a pleasant-to-use moisturizing cream with well-known ingredients and proven efficacy)
- a topical anti-inflammatory treatment (topical corticosteroids and sometimes tacrolimus) during flare-ups and to prevent flare-ups when necessary.

This local treatment is not easy to understand or apply, and prescriptions must be accompanied by oral and written informative and educational methods.

This "standard" treatment is highly effective, once it is well received, understood and carried out. In cases of treatment-resistant atopic dermatitis, caregivers must ensure that the treatment has been followed correctly before making changes or switching to "heavy" therapy.

There are many pitfalls, mainly a poor understanding of the benefit of topical corticosteroids. One must therefore ensure that the patient is correctly applying the necessary quantities (e.g. up to 100 g per month of a potent topical corticosteroid for an adult in flare-up phase) and gradually reducing dosage to maintain good results with low topical corticosteroid use. It is difficult to provide more precise details, since this depends on the patient, surface affected and clinical condition. Obtaining a good clinical result and low anti-inflammatory consumption is of utmost importance. Using an effective, well-tolerated and pleasant-to-use emollient daily, in generous quantities, is an invaluable way of achieving this.

Practical demonstrations, or even therapeutic education sessions during Atopy workshops are especially useful. In this way, a short hospital stay or even a one-day admission can completely transform AD development. Patients can learn skin care techniques, for example, when products must be applied under occlusion (plastic films) in cases of thick lesions.

### Is the situation serious enough to merit systemic treatment?

Despite everything, there are cases and situations where treatment is not enough and more is required (SCORAD remains high, eczema has devastating effects on morale and daily activities)<sup>3</sup>.

### Phototherapy

In cases such as these, phototherapies<sup>4</sup> are often proposed. The concept of phototherapy is to expose patients to ultraviolet rays that have an anti-inflammatory effect on the skin, in addition to their well-known pigmenting action. In atopic dermatitis, UVB or a combination of UVA and UVB rays are used, instead of standard PUVAtherapy. A first series of about twenty sessions over a 6-8-week period yields good results, and sessions can then be spaced out. These phototherapies practiced by specialized dermatologists are certainly not to be confused with tanning beds, which are not recommended.

### Systemic medicinal treatments

Oral corticosteroids and immunosuppressants have good efficacy against atopic dermatitis. However, when used for long periods, these medicines can trigger side effects more severe than the disease itself.

**Oral corticosteroids**, are generally firmly contraindicated in atopic dermatitis, since side effects and cortico-dependency are inevitable. Moreover, the immediate results obtained with strong local corticotherapy can be just as good.

**Ciclosporin** can be indicated in rare cases of particularly severe AD. The usual dose is about 2 to 3 mg/kg/d <sup>5</sup>. Blood pressure and renal function should be monitored closely, as well as normal laboratory values. The treatment can only be prescribed for a few months, and caregivers should be prepared to manage the "after-ciclosporin" effects by assiduously recommencing standard

treatment. Ciclosporin is thus useful for getting patients through a “rough patch”, but is unfortunately not a definitive AD cure. Such a cure is yet to be achieved.

**Some prescribers prefer methotrexate<sup>6</sup>** over ciclosporin for their patients. The standard dose is 15 mg per week, orally or parenterally. Monitoring focuses mainly on hepatic function. This is another case where a few months of treatment can be administered to get through a severe flare-up, before returning to standard treatment.

**Other immunosuppressants**, such as azathioprine, can be used. However, experience with this therapy is much more limited.

### Cutting-edge research

It is evident that AD treatment, especially for severe cases in adults, needs to be improved.

For this reason, scientists continue their research, in the hope of finding safe, more effective new treatments in the near future.

It was recently proven that a monoclonal antibody targeting interleukins 4 and 13, major atopic inflammation mediators, was able to calm AD<sup>7</sup>, as well as some types of asthma. But this is no “miracle” treatment; it appears to be another method of easing severe flare-up symptoms.

### Illustrations

Figure 1: The eyelids are often affected in adult AD. This is an area where special care should be taken in using topical corticosteroids. Ophthalmological monitoring is required. Even so, complications are very rare.



Figure 2. Atopic dermatitis of the face, with significant cheilitis.



Figure 3: Lichenified, cracked chronic eczematous skin in an elderly man who abandoned all treatment, mainly for psychological reasons.



Figure 4: Typical chronic eczema with criss-cross lichenification and oozing acute flare-up, with a possible secondary infection.



Figure 5: Typical appearance of chronic eczema.



## References

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