



Proactive treatment and clinical effectiveness in atopic dermatitis

Atopik dermatitte proaktif tedavi uygulaması ve klinik etkinliği

Ülker Gül

University of Health Sciences, Dışkapı Yıldırım Beyazıt Training and Research Hospital, Clinic of Dermatology, Ankara, Turkey

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To the Editor,

The consensus report named "The Turkish guideline for the diagnosis and management of atopic dermatitis-2018" published in the Turkish Archives of Dermatology and Venereology (Turkderm) 2018;52:6-23 date and issue, has fulfilled an important gap on this topic in Turkey. However, 'proactive treatment', which is an important treatment application in atopic dermatitis (AD), was mentioned only in tables in this guideline. Therefore, I would like to contribute to this valuable study by giving more details regarding proactive treatment.

Epidermal barrier dysfunction involved in the pathogenesis of AD may also exist in clinically normal skin without lesions¹. Increased transepidermal water loss, which is one of the indicators of epidermal barrier dysfunction, is also observed in clinically normal skin². Increased permeability of allergens in the large-molecule protein structure is an important problem also in non-lesional skin with barrier dysfunction. Thus, allergic sensitization continues in areas without lesion. As a result, there is a subclinical eczematous reaction in non-lesional skin with normal appearance in patients with AD³⁻⁶. For this reason, in recent years, proactive treatment has been proposed for patients receiving active treatment in order to

prevent/delay activation^{3,9}. Proactive treatment is proposed to be performed by long-term, intermittent application of low-dose inflammatory therapy together with emollient use for healed skin with AD³⁻⁶.

Indication of proactive treatment

The aim is to prevent exacerbation and prolong lesionless periods with maintenance therapy after active treatment. Proactive treatment is applied in patients with moderate and severe AD with exacerbations occurring four times or more a year³⁻⁶.

Application area, frequency and duration of proactive treatment

In the literature, it has been reported that anti-inflammatory treatment is indicated for skin healed with active treatment but prone to relapse³⁻⁶. Furthermore, moisturizer application should be continued^{3-5,10-20}.

Topical anti-inflammatory medications are usually recommended to be used 2 days per week. Topical corticosteroids (TCS) should be generally applied once, while topical calcineurin inhibitors (TCI) should be applied twice on treatment day. In addition, moisturizers should be applied daily^{3-5,11-13}.

Address for Correspondence/Yazışma Adresi: Ülker Gül MD, University of Health Sciences, Dışkapı Yıldırım Beyazıt Training and Research Hospital, Clinic of Dermatology, Ankara, Turkey Phone.: +0533 2333830 E-mail: ulkerkul@yahoo.com **Received/Geliş Tarihi:** 18.04.2018 **Accepted/Kabul Tarihi:** 04.09.2018

ORCID ID: orcid.org/0000-0003-4203-7998



The duration of prophylactic treatment is 3 months for TCS (methylprednisolone aceponate and fluticasone propionate) and 1 year for tacrolimus. It is important that the patient and the physician who follows up the patient should together assess the situation and course of the disease with related parameters and thoroughly discuss the pros and cons of the treatment. Although intermittent treatment and low potency anti-inflammatory treatment agents are used, the patient needs to be informed regarding the possible side effects associated with long-term topical anti-inflammatory treatment.

Therapeutic agents used in proactive treatment

1. Topical corticosteroids: In their study, Hanifin et al.¹⁰ compared intermittent dosing regimen of 0.05% fluticasone cream with its vehicle base. They found that patients in the intermittent fluticasone-treated group were 7.7 times less likely to have an AD relapse compared to placebo group. It has been reported that fluticasone propionate cream use was not associated with skin thinning or atrophy¹⁰. In a study by Berth-Jones et al.¹¹, it was found that patients who used fluticasone propionate cream were 5.8 times less likely and patients using fluticasone propionate ointment were 1.9 times less likely to have a relapse than patients applying emollient alone. Peserico et al.¹² reported that emollient and methylprednisolone aceponate 0.1% cream application twice a week reduced the risk of relapse in patients with AD. In a study by Fukuie et al.⁶ published in 2016, it was observed that in children with moderate and severe AD treated with intermittent TCS for 1 year, an increase in aeroallergen-specific IgE level was prevented and the severity of AD was reduced.

In the European Dermatology Forum Guidelines for Treatment of Atopic Eczema published in 2018, the recommendation strength and evidence grade for the application of TCS twice a week to reduce relapses were 1b, A. This guideline also stated that the use of TCS for 20 weeks was safe (evidence grade 1b, A)¹³.

2. Topical calcineurin inhibitors: According to the Niedner classification, tacrolimus is of similar efficacy to class 2 and 3 TCS, while pimecrolimus to class 1 TCS. Tacrolimus is more frequently used in proactive treatment¹²⁻²⁰. There is no study for pimecrolimus^{3,4,13}. In The European Dermatology Forum Guidelines for Treatment of Atopic Eczema published in 2018, tacrolimus is among the drugs used for proactive treatment of TCIs (Evidence grade 1b, A)¹³.

Regular intermittent usage of tacrolimus twice a day, twice or three times a week, reduces the rate of relapse in AD and increases the number of disease-free days^{3,6,13-20}. It is proposed to continue treatment for 1 year. It has been reported that no side effect was observed in one-year use^{5,14,20}.

Ethics

Informed Consent: Informed consent was not taken. We didn't use any information about patient.

Peer-review: Externally peer-reviewed.

Conflict of Interest: No conflict of interest was declared by the author.

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