



ATOPIC ECZEMA/DERMATITIS

## DUPILUMAB FOR TWINS

*Giulia Calabrese<sup>(1)</sup> - Alessio Gambardella<sup>(1)</sup> - Stefano Caccavale<sup>(1)</sup> - Eugenia Veronica Rita Di Brizzi<sup>(1)</sup> - Giuseppe Argenziano<sup>(1)</sup>*

*Università Della Campania Luigi Vanvitelli, Dermatology Unit, Department Of Mental And Physical Health And Preventive Medicine, Napoli, Italy<sup>(1)</sup>*

**Background:** Atopic dermatitis is a chronic pruritic disease characterized by erythema, vesicles, crusts and lichenification. The causes of atopic dermatitis are not well known, but several genetic and environmental factors seems to be involved.

**Observation:** We report the cases of 42-year-old identical twin brothers affected by severe atopic dermatitis, asthma and allergic rhinitis since childhood. Skin manifestations were non-responsive to antihistamines, topical corticosteroids and cyclosporine. They referred to our clinic with incoercible pruritus, dry skin and generalized eczematous lesions localized to the face. The EASI score( Eczema Area and Severity Index) was 30 points for patient number 1 and 26 points for patient number 2. Patient number 1 showed major facial involvement with diffuse erythema, scales and allergic conjunctivitis. Based on these features, we decided to treat both with dupilumab, a monoclonal antibody against IL-4. After three months of therapy, patient number 1 showed persistent facial erythema with an EASI score equal to 20 (reduction of less than 35% compared to the basal score) while patient number 2 presented a considerable improvement of eczema with an EASI score equal to 6 (reduction of 80% compared to the basal score). Both patients had sedentary jobs (the former was a teacher, the latter was an engineer) and lived in the same place.

**Key message:** Our patients represent the first cases of twins affected by atopic dermatitis treated with dupilumab described in literature. The different outcome to therapy of these identical twins that lived in the same city and had similar jobs confirms the complex etiopathogenesis of this disease.

