ABSTRACT BOOK ABSTRACTS



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PSORIASIS

## EXPRESSION OF DEATH RECEPTOR 3 (DR3) ON PERIPHERAL BLOOD MONONUCLEAR CELLS (PBMCS) IN PATIENTS WITH PSORIASIS VULGARIS

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Background: Multiple lines of evidence have indicated TL1A and its receptor death receptor 3 (DR3) in the pathogenesis of psoriasis, although their role in the development of this disease remains not fully explained. Our previous studies demonstrated that serum TL1A levels were significantly elevated in patients with psoriasis vulgaris (PV), but there are no reports concerning the expression of DR3 on peripheral blood mononuclear cells (PBMCs) of patients with PV.

Objective: To study the expressions of Death Receptor 3 (DR3) on Peripheral Blood Mononuclear Cells (PBMCs) in Patients with psoriasis vulgaris and determine whether the percentage of DR3-expressing PBMCs is associated with the phrase of the disease.

Materials and Methods: We performed flow cytometry analysis of DR3 expression on CD4 (+), CD8 (+), CD14 (+) or CD19 (+) PBMCs of patients with PV, atopic dermatitis (AD) and healthy volunteers. Blood samples were collected and from patients before and after the treatment. The severity of psoriasis was evaluated by the Psoriasis Area Severity Index (PASI). Then, correlation analysis was used to investigate the relationship between DR3 expression and disease severity in patients with PV.

Results: With regard to healthy volunteers and AD patients, patients with PV had elevated percentage of DR3-expressing CD 8(+) and CD14 (+) PBMCs. The percentage of DR3 on CD8 (+) and CD14 (+) cells decreased after anti-inflammatory treatment and correlated with PASI scores.

Conclusions: In comparison to healthy volunteers and AD patients, untreated patients with PV have higher percentage of DR3 (+) PBMCs. In the investigated PBMCs populations, the frequency of CD8 (+) DR3 (+) and CD14 (+) DR3 (+) cells are correlated with PASI scores. The frequency of DR3 (+) PBMCs in PV patients decreases after anti-inflammatory treatment.





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