



PSORIASIS

## STUDY OF TH17 PATHWAY IN PSORIATIC PATIENTS USING CYCLOSPORIN

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**INTRODUCTION:** The Th17 pathway, responsible for the synthesis of IL-17, has received increasing importance in the pathogenesis of several inflammatory diseases, including psoriasis. Therefore, it has been verified that if this pathway is not addressed, there will continue to be an escape for the emergence and maintenance of the pathological process. Agents such as cyclosporine can act at multiple points in the immune chain of the disease, including cyclosporin modulation on Th17 pathway.

**MATERIAL AND METHODS:** 20 patients with generalized psoriasis, ranging in severity from moderate to severe, were treated with a dose of 3mg/kg /day of cyclosporin and evaluated clinically and laboratorially for eight weeks. A skin biopsy was performed at the beginning and at the end of treatment to perform an immunohistochemical study of IL17 expression.

**OBJECTIVE:** Correlate the frequency of inflammatory infiltrate cells expressing IL-17 with disease severity before and after cyclosporine treatment.

**RESULTS:** The clinical response of the patients was demonstrated by the significant reduction of PASI (mean of 22.5 and median of 17.5, and  $p < 0.0001$ ) after eight weeks of treatment, with low doses (3mg/kg), without significant changes in laboratory tests. There was a significant decrease in IL17, in median values, of 4% in the absolute delta ( $p = 0.0007$ ) and 28.6% in the relative delta ( $p = 0.001$ ). There was no significant correlation, at the 5% level, between the PASI before the treatment and its variation (absolute delta) with the variation of the immunohistochemical markers.

**CONCLUSIONS:** Cyclosporin is an effective and safe drug in the treatment of psoriasis when used in low doses and has been able to promote the reduction of IL17 expression in the psoriasis plaque. There was a correlation in the reduction of cells positively labeled for IL-17.

