



PSORIASIS

THE ACITRETIN AND METHOTREXATE COMBINATION THERAPY FOR PSORIASIS VULGARIS ACHIEVES HIGHER EFFECTIVENESS AND LESS LIVER FIBROSIS

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Background: Both acitretin and methotrexate are effective in ameliorating psoriatic lesion. However, their combination has been seldom reported in the treatment of psoriasis because of the warning regarding the potential hepatotoxicity of the drug interactions.

Objective: This study was designed to investigate the effectiveness of such combination therapy for psoriasis vulgaris, and the potential benefit as well as side effect during the treatment.

Materials and Methods: Thirty-nine patients with psoriasis vulgaris were treated with acitretin, methotrexate or their combination or as control. Similarly, K14-VEGF transgenic psoriasis-like mice were treated with these drugs. Human primary keratinocytes and hepatic stellate cells were used for analyzing their effect in vitro.

Results: The combination therapy exhibited higher effectiveness in remitting skin lesion, but did not significantly affect the liver function of both patients and mice. Moreover, the combination groups showed less elevation of profibrotic factors in sera when compared with methotrexate alone groups accordingly. Furthermore, primary keratinocytes expressed more involucrin as well as loricrin and proliferated more slowly on the combined stimulation. Interestingly, such combination treatment induced lower expression of profibrotic factors in hepatic stellate cells.

Conclusions: The acitretin-methotrexate combination therapy for psoriasis vulgaris can achieve higher effectiveness and result in less liver fibrosis.

