

Comparison between the Efficacy of Microneedling Combined with 5-Fluorouracil vs Microneedling with Tacrolimus in the Treatment of Vitiligo

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Introduction: Several treatment modalities had been used for the treatment of Vitiligo but the optimal treatment has not yet been identified.

Material and Methods: 25 patients with Vitiligo were subjected to Microneedling of two patches of Vitiligo with Dermapen, then application of 5-Fluorouracil to one patch and Tacrolimus on the other patch. This procedure was repeated every 2 weeks for every patient for maximum 6 months (12 sessions). The patients were followed up for 3 months after the last session.

Results: The overall repigmentation was significantly higher in 5-Fluorouracil treated patches compared with Tacrolimus. Excellent improvement occurred in 48% of 5-Fluorouracil treated patches while only in 16% of Tacrolimus treated patches. In the acral parts, 40% of the patches treated with 5-Fluorouracil achieved excellent improvement (repigmentation > 75%), while no patch in the acral parts achieved excellent improvement with Tacrolimus. However, there was significant difference between the two drugs, regarding inflammation, ulceration and hyperpigmentation which occurred with 5-Fluorouracil.

Discussion: Microneedling combined with 5-Fluorouracil or Tacrolimus is safe and effective treatment of Vitiligo. However, 5-Fluorouracil achieved a greater percentage of repigmentation than Tacrolimus particularly in the acral part.