# **Study the efficacy of Microneedling and Narrow Band Ultraviolt B Phototherapy in Vitilgo Treatment**

Asmaa EL Refaey, Sara S. Elsayed, Shymaa M. Rizk

Department of Dermatology, Venereology and Andrology, Benha faculty of medicine, Benha University, Egypt. **Correspondence to:** Sara S. Elsayed, Department of Dermatology, Venereology and Andrology, AL Azhar University, Cairo, Egypt **Email:** smssara3@gmail.com **Received**: 26 December 2022 **Accepted**: 8 February 2023 **Print ISSN** 1110-208X **Online ISSN** 2357-0016

**Abstract**

**Background:** Vitiligo is an acquired chronic idiopathic disorder characterized by progressive, patchy loss of pigmentation from the skin, overlying hair, and sometimes oral mucosa. The depigmented patches result from loss of melanocytes from the involved areas, apparently on an autoimmune basis. The resulting pigmentary disfigurement can be quite traumatic, especially when it involves the face, hands, and genitals**. Objectives:** The aim of this study was to assess the efficacy of microneedling and narrow band ultraviolet B phototherapy for treatment of vitiligo patients. **Methods:** This was a prospective study including 15 patients with bilateral nearly symmetrical non segmental vitiligo. Evaluation of the treatment was done by photography, clinical examination to assess the disease severity using Vitiligo Extent Tensity Index (VETI) score, and evaluation of re-pigmentation. **Results:** The VETI score ranged from 19 – 48 with a mean value of (±SD) 34.47 ± 9.43 at baseline, ranged from 10 – 40 with a mean value of (±SD) 27.47 ± 9.69 at 3 months and ranged from 9 – 40 with a mean value of (±SD) 26.73 ± 9.76 at 6 months. VETI score was significantly lower at 3 months,6 months compared to baseline and at 6 months compared to 3 months(*p*<0.001). **Conclusions:** Skin microneedling in combination with NB-UVB phototherapy is a safe and effective treatment option for stable localized vitiligo.

**Key words:** Vitiligo; Microneedling; NB-UVB phototherapy.