

NARROW BAND UVB (NBUVB) PHOTOTHERAPY IN THE TREATMENT OF VITILIGO IN ASIAN SKIN TYPE

Sunil Dogra MD, DNB, MNAMS, Dip Dermatology (Glasgow)

Department of Dermatology, Venereology and Leprology

Postgraduate Institute of Medical Education and Research, Chandigarh-160 012, India

E-mail: sundogra@hotmail.com

Vitiligo is an acquired depigmentary disorder of great cosmetic importance characterized by loss of melanocytes from epidermis. It affects people of all races and the prevalence varies from 0.1% to 4% in different parts of the world. In societies like ours, there is marked social stigma associated with vitiligo, thus challenging the dermatologist with effective management. Narrow band UVB NBUVB is a new addition to the armamentarium of therapies for vitiligo. The mechanism of action of narrow-band UVB phototherapy has not been completely understood. Similar to PUVA therapy, NBUVB may exert its effects in vitiligo in a two-step process: both of which may occur simultaneously. First being the stabilization of the depigmenting process and second, the stimulation of residual follicular melanocytes. Well-documented immunomodulating effects of UV radiation can explain the stabilization of the local and systemic abnormal immune responses. It is also likely that narrow-band UVB similar to PUVA therapy stimulates the dopa-negative, amelanotic melanocytes in the outer hair root sheaths, which are activated to proliferate, produce melanin and migrate outward to adjust depigmented skin resulting in perifollicular repigmentation. The clinical experience with NBUVB in vitiligo is limited with few reports published in the literature so far. However, initial results have been encouraging with a growing interest in its use in vitiligo worldwide. Earlier reported studies have evaluated its role mostly in Western population. Encouraging experience in Indian patients is evidence of its useful role in the treatment of vitiligo in Asian

skin type. Like in type I-III skin type, this form of therapy is useful and produces cosmetically good colour match in Asian patients. Distinct advantages over PUVA include lack of psoralen related side effects and precautions, cosmetically better color match, and its safety in children. However, the relative stability of NBUVB induced repigmentation over PUVA, its maximum safe duration and cumulative dose allowed still remain to be determined.