

PHOTOTHERAPY, PHOTODYNAMIC THERAPY

## PUVA AND NB-UVB IN ADULT VITILIGO: A DOUBLE BLIND RANDOMIZED CONTROLLED TRIAL

*Indrashis Podder<sup>(1)</sup> - Karan Sancheti<sup>(2)</sup>*

*Cmsdh, Cmsdh/ Wbuhs/ Dermatology, Kolkata, India<sup>(1)</sup> - Private Practice, Private Practice, Kolkata, India<sup>(2)</sup>*

**Introduction:** Vitiligo is a relatively common depigmenting dermatological disorder in adults. Several treatment modalities exist with varying success rates. Recently physical modalities like PUVA and NB-UVB are showing promising results.

**Aims and Objectives:** To compare two widely reported treatments, NB-UVB and PUVA in treating vitiligo by assessing 1) clinical effectiveness and 2) safety and quality of life in the two treatments.

**Materials and Methods:** In this double blind randomized controlled trial, patients were screened and randomly allocated to receive PUVA or NB-UVB. The phototherapy cabinet labels were concealed. Patients ingested identical looking capsules: placebo (NB-UVB) or trimethoxypsoralen (PUVA) 2 hours before treatment. Mean percentage of repigmentation, Vitiligo area scoring index (VASI), physician global assessment score, patient global assessment score were assessed. The dermatology life quality index and laboratory parameters were calculated at baseline and three monthly intervals, and adverse effects noted.

**Results:** Amongst 112 patients, 103 (53 PUVA, 50 NB-UVB) completed treatment. Significant reduction ( $P < 0.01$ , Friedman's ANOVA) in VASI, physician and patient global assessment score and DLQI noted from 8th and 12th week in NB-UVB and PUVA group respectively ( $P < 0.05$ , Post Hoc Dunns test). Improved area under the graph post-treatment was more in NB-UVB ( $p = 0.010$ ). Adverse events were more with PUVA ( $P > 0.05$ , Fischer's exact test). Repigmentation (50% ) was 23.5% with PUVA and 52% with NB-UVB ( $P = 0.043$ , Fischers test). Treatment failure (no improvement after 32 session) was more ( $P = 0.009$ ) in PUVA (42.9%) than NB-UVB (8.69%). Quality of life was improved ( $P < 0.001$ , Wilcoxon's Test) in both group similarly.

**Conclusion:** Both NB-UVB and PUVA are effective and safe treatments for vitiligo. NB-UVB is a better therapeutic modality in vitiligo due to its early response and less treatment failure.

**Conflict of interest:** None



Key words: Vitiligo, PUVA, NBUVB

