Letter to Editor

Determination of minimum erythema dose for narrow band UVB therapy and skin typing

Sir,

This letter is with regard to the article by Tejasvi et al. titled "Determination of minimal erythemal dose for narrow band-ultraviolet B radiation in north Indian patients: Comparison of visual and Dermaspectrometer readings."[1] The authors do not mention whether the meter can detect erythema when the eye cannot detect it. This would be of significance with respect to the Indian skin.

With regard to the skin type III having a higher minimal erythema dose (MED) than type IV in some cases, we have observed the same finding while working with BB-UVB.[2] The MED seems to depend on sex and occupation of the patient.[2] Females have a lower MED, and similarly, men with indoor occupation have a lower MED, even if they are darker.[2] This finding underscores the requirement for separate skin typing for Indian skin. Because of this reason, the blind delivery of NB-UVB without MED assessment will lead to the delivery of either a very high dosage or grossly inadequate dosage of UV rays.

To overcome the problem of skin pigmentation by masking just perceptible erythema, it would be safer for the Indian skin to go down one step while ascertaining the MED, i.e., if MED has been determined using 750, 800, 850, 900, 1000 mj and so on and just perceptible erythema is detected at say 900 mj, then 850 mj may be taken as the MED to calculate the dose of NB-UVB.

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REFERENCES


Response by authors

Sir,

We appreciate the interest and response of Dr. C.R. Srinivas in our publication with regard to the determination of minimal erythema dose (MED) in narrowband UVB (NB-UVB).[1] The aim of our study was to standardize the MED with an objective parameter using Dermaspectrometer. We did not find statistically significant differences in the visual reading and Dermaspectrometer reading; however, the instrument can detect erythema, which may not be appreciated by eye and avoids subjective variation.

Most of the patients recruited in the study were females (n = 31 out of 41), and we could not find any variation in the MED between the genders. Probably, further studies with no gender bias and more number of subjects could provide a definite answer.

The recruited patients were tested for MED prior to the starting of the NB-UVB treatment, and we started at 70% of their respective MEDs and no patient complained of excessive burning. Hence, the reduction by 50 mj from the obtained MED was not practiced by us. In situations where a patient complains of increased sensitivity, the usage of 50% of the MED has been suggested.

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