Laser Dermatology in the Subcontinent: Coming of Age!

Dermatologic laser surgery has come of age in India with more than one and a half decades of experience and the extraordinary work that has been carried out in brown skin (Fitzpatrick skin types IV and V), which is unique to the subcontinent. Guidelines have already been published by a task force constituted by our Indian Association of Dermatologists, Venereologists and Leprologists (IADVL) on the management of pigmented lesions, tattoos, and acne scars in Indian skin with the help of experts in the field.^[1] Much of the erstwhile data on lasers have come from the Western world, which was primarily on Caucasian skin, which is typically Fitzpatrick skin type I–III. Performing laser surgery on brown skin poses certain challenges because of the unpredictability of response and increased possibility of adverse effects. As a general rule, treatment in our skin types requires use of lower fluences, longer wavelengths, and cooling to ensure satisfactory results albeit at the cost of more number of sessions (though there are always some exceptions to the rule). Sun protection and priming are a crucial part of laser protocol and form an integral part of pretreatment and posttreatment regime. There has been a blanket advisory against performing lasers on patients who are on or who have recently completed a course of isotretinoin. Again an Indian task force was formed to look into this aspect and they concluded that non-ablative and fractional lasers were safe in this subset of patients. [2] This landmark article has far-reaching consequences in facilitating laser therapy in patients who would have otherwise been deprived of it for a long period. The current laser symposium deals with a few challenging yet frustrating aesthetic problems faced in dermatologic practice, namely pigmented acne scars, melasma, and tattoo removal. For pigmented acne scars, a single modality seldom works and one has to resort to combinations for best outcomes, similarly laser toning has gained popularity in melasma but there is no consensus regarding best protocol nor the total number of sessions needed for best results, and it still remains a third-line management option.[3] An attempt has been made to collate and scrutinize data on laser toning and to rationalize laser treatment in melasma with inputs from the authors regarding Indian experience with laser toning. There is a strong and growing demand for laser tattoo removal and that too quickly. Owing to either social or occupational reasons, these patients seek tattoo removal on a rather urgent basis. The traditional protocol involved multiple sessions spaced out at 4- to 8-week intervals that would invariably need many months to clear tattoos. The innovation of the R0 technique that uses perfluorodecalin

(PFD) in the form of a spray or PFD-impregnated transparent sheets allows rapid multipass high-fluence Q-switched Nd:YAG laser treatment bringing down the total treatment duration significantly as highlighted in one of the articles. The symposium offers insights to these burning issues and elaborates on advances made in this field with particular relevance to Indian skin types.

Financial support and sponsorship

Nil

Conflicts of interest

There are no conflicts of interest.

Sanjeev J. Aurangabadkar

Skin and Laser Clinic, Hyderabad, Telangana, India

REFERENCES

- Aurangabadkar S, Mysore V. Standard guidelines of care: lasers for tattoos and pigmented lesions. Indian J Dermatol Venereol Leprol 2009;75:111-26.
- Mysore V, Mahadevappa OH, Barua S, Majid I, Viswanath V, Bhat RM, et al. Standard guidelines of care: performing procedures in patients on or recently administered with isotretinoin. J Cutan Aesthet Surg 2017;10:186-94.
- 3. Khunger N; IADVL Task Force. Standard guidelines of care for acne surgery. Indian J Dermatol Venereol Leprol 2008;74:S28-36.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

Address for correspondence: Dr. Sanjeev J. Aurangabadkar, 1st Floor, Brij Tarang, Green Lands, Begumpet, Hyderabad, Telangana, India. E-mail: sanjeev.aurangabadkar@gmail.com

Access this article online Quick Response Code: Website: www.jcasonline.com DOI: 10.4103/JCAS.JCAS_66_19

How to cite this article: Aurangabadkar SJ. Laser dermatology in the subcontinent: Coming of age! J Cutan Aesthet Surg 2019;12:75.