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LETTERS TO THE EDITOR

"Safety and efficacy of photofacial in Indian skin—A study on 82 patients"

To the Editor

Photorejuvenation is a commonly done cosmetic procedure, to give patients clear, firm, and youthful skin with no downtime. It is done using number of nonablative lasers including Pulsed dye lasers and Q switch ND YAG lasers, targeting microvessels and IPL (Intense Pulse Light) targeting both melanin and microvessels.[1] Mid-infrared lasers targeting dermal water and collagen-like 1320nm Nd YAG[2] and low-intensity diode are also used and have been found to be very good for anti-aging but do not improve pigmentary or vascular abnormalities.[3] There are no studies showing the safety and efficacy of this commonly done procedure on Indian skin; hence, we undertook this open-label, single-arm clinical study on 82 patients with Q-switched Nd YAG laser.

Adult patients (>18 years)with any of following indications—fine lines, uneven texture and tone, dry photodamaged skin or rosacea—were included in study. Patients with history of photosensitivity and epilepsy were excluded. An informed consent was signed, and photographs were taken. Patient was advised to avoid massages 4 days before and after. Eye protection with advised goggles was done for both patient and practitioner. 1064-nm wavelength of Q-switched Nd YAG laser was chosen along with spot diameter of 4 mm. 2 passes of laser energy were delivered on full face and neck using a flat-top beam. The energy for 1st session was 300 mJ. Energy was increased to 600, 900, 1200, and 1500 mJ in subsequent sessions. End point for rejuvenation was slight warmth and redness over treated area. Skin was evaluated for intense redness, and patient comfort was assessed at regular intervals.

Each patient was given 5 sessions at a gap of 1 month each. Patients were assessed on basis of Patient global assessment (PGA) on a 0–10 VAS scale. Skin type at presentation, VAS assessment, and factors affecting these scores were analyzed using t test (two tailed). A p value <0.05 was considered significant.

Appreciably higher number of patients of skin type 4 registered for photorejuvenation therapy. Patients satisfied with the treatment were statistically higher with about 1/3 of patients being very satisfied (Assessment score 3) as shown in Table 1. Upon analyzing factors affecting the VAS patient assessment score, there was no

TABLE 1 Baseline Clinical Profile and VAS assessment score of patients after photorejuvenation therapy

Parameter		*n* (%) *N* = 82	p value
Mean age (years)	38.51		
Skin	Type 4	75 (91.5%)	<0.001
	Type 5	7 (8.5%)	
VAS Assessment score	Assessment 1(VAS 0–3)	1 (1.2%)	<0.001
	Assessment 2(VAS 4–7)	57 (69.5%)	
	Assessment 3(VAS 8–10)	24 (29.3%)	

FIGURE 1 Baseline

FIGURE 2 After 4 sessions of photorejuvenation at monthly intervals

noticeable influence of age and skin type on the scores (p value 0.89 and 0.97, respectively).

Procedure was well tolerated by most patients. Out of 82 patients, 28 (35%) of patients developed mild transient erythema post-procedure that subsided with ice application.

Photorejuvenation helps in improving the skin texture, reducing hyperpigmentation, decreasing superficial wrinkles and fine lines, improving acne especially inflammatory ones, and increasing the blood circulation.[4] A study by Negishi et al has shown excellent improvement in more than 90% cases of pigmentation, more than 83% of telangiectasias, and 65% of skin texture in Asian skin with IPL photofacials.[5]

In author's experience, this procedure has been found to be especially useful in patients having dry, damaged skin due to excess steroid use or excess use of resurfacing lasers or deep peels. Patients with rosacea and abnormal flushing also show good results after 4–6 sessions. It is an excellent modality for improvement of skin texture and tone practically zero downtime. (Figure 1 & 2). Photo facial as skin rejuvenation procedure has been gaining popularity in the recent past due to excellent safety profile and a wide range of esthetic issues that can be improved using this technique.

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