



LASERS

EFFICACY OF DUAL MODE QUASI-LONG PULSED & Q SWITCHED 1064NM ND:YAG LASER AS AN ADJUVANT IN MANAGEMENT OF ACTIVE ACNE VULGARIS

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Background: AcneVulgaris needs a multi-pronged approach in order to achieve faster resolution. Quick control of active acne is important to prevent sequelae like post inflammatory hyperpigmentation & scarring.

Objective: Evaluate the efficacy of dual mode quasi-Long Pulsed & Q Switched 1064 nm Nd:YAG laser as an adjuvant in management of Active Acne Vulgaris

Materials&Methods: 380 patients undergoing standard treatment for Active Acne were included in the study. The patients were randomly divided into two groups A & B. GroupA was treated with two sessions of Nd:YAG laser in dual modes, performed 15days apart.

First pass-quasi long Pulse mode with 300microsecond pulse-width with minimal overlap, single-pass in subablative low-fluence mode(<2.5J/cm²).

Second pass-Q -Switched mode with ablative fluences ranging from 1.8-2.5 J/cm² and 2-3 passes with 1/3rd area overlap along with a topical carbon solution. The groupB was not treated with any laser. Both the groups were continued on the standard oral and topical acne treatment regimens.

The photographic results were analysed on Day15 & Day30 by an independent blinded dermatologist and improvement graded on a Physician Global Assessment(PGA) Scale. Also, a)reduction in number of inflammatory acne, b)reduction in non inflammatory acne lesions and c)development of erythematous and atrophic scars were noted.

Results: GroupA had a statistically significant better PGA scores as compared to Group B. Also, in all the other parameters, the improvement in group A was statistically significant, as compared to groupB. The dual-mode Nd:YAG-laser leads to a significantly quicker resolution of inflammatory acne. As compared to regular treatment, there is reduction in pre-scarring erythema and the post-acne scarring, both.

Conclusion: Dual Mode quasiLong Pulsed and Q-Switched Nd:YAG-Laser is an important





adjuvant in the treatment for active acne lesions. The intervention with this modality helps in delivering patients with a quicker resolution of symptoms and prevention of scarring sequelae.

