

LASERS

COMPARING THE EFFICACY AND SAFETY OF FRACTIONAL CARBON DIOXIDE LASER VERSUS TRICHLOROACETIC ACID PEEL 15% IN THE MANAGEMENT OF ACANTHOSIS NIGRICANS

N Shah⁽¹⁾ - Y More⁽²⁾

Smt. Kashibai Navale Medical College And General Hospital, Dermatology, Venereology And Leprosy, Pune, India⁽¹⁾ - Smt. Kashibai Navale Medical College And General Hospital, Dermatology, Venereology And Leprosy, Pune, India⁽²⁾

INTRODUCTION: Acanthosis nigricans (AN) is characterised by velvety, brownish-black plaques, typically on the intertriginous surfaces and the neck. AN is a cutaneous marker for various systemic causes and a cause of cosmetic concern. Many treatment modalities are being used with varying degrees of success and have associated side effects.

OBJECTIVE: to compare the efficacy and safety of fractional CO₂ Laser versus Trichloroacetic acid (TCA) peel 15% in AN treatment.

MATERIALS AND METHODS: 100 patients with AN involving the nape of the neck visiting dermatology OPD were selected for a Randomized Controlled study. Patients were divided into two groups of 50 each. Group A received treatment with Fractional CO₂ Laser. Group B with TCA 15% peel. Patients were graded as per Investigator's Global Evaluation scale and Patient's Global Evaluation scale. The side effects such as erythema, scaling, burning, hyperpigmentation, itching and bleeding were graded in all the patients according to Side effect Severity scale. All the patients were treated at intervals of 15 days for 6 sessions. Digital photographs were taken at the baseline and at monthly interval.

RESULTS: On comparing at the end of 4th and 6th treatment, the Investigator's Global Evaluation Scale showed statistically significant improvement in patients treated with CO₂ Laser as compared to TCA peel (p value=0.03 and 0.002 respectively). Patient's Global Evaluation scale showed significant improvement with CO₂ Laser. Incidence of side effects like burning and hyperpigmentation were more in patients treated with CO₂ laser (p value=0.005 and 0.04 respectively at the end of 6th session)

CONCLUSION: Fractional CO₂ Laser has better efficacy as compared to TCA 15% peel in treatment of AN. However, TCA 15% peel is safer than Fractional CO₂ Laser. This is a unique study as there is no such study published comparing the efficacy and safety of these



two treatment modalities for AN.

