

EVALUATION OF THE COMBINATION OF DIODE LASER (900 nm) WITH RADIOFREQUENCY (RF) ENERGIES IN TREATMENT OF PERIORAL WRINKLES

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Background and Objectives: The combination of diode laser and RF energies is used for the treatment of mild to moderate facial rhytides and skin laxity. The objective of this study is to evaluate the Polaris WRTM (Syneron Inc, Yokneam, Israel) in the treatment of perioral wrinkles.

Materials and Methods: Twenty women (mean age 52.5 years, range 48–66; skin phototypes III–IV) with mild to moderate perioral rhytides corresponding to Fitzpatrick scale of 3 to 5 received 3 to 4 Polaris treatments using the fluencies of 35–45 J/cm² and 75–89 J/cm³. Clinical results were evaluated three months after the last treatment. Digital photographs were used to assess the outcomes. Patients were asked to rate their improvement.

Results: All 20 patients completed treatments and showed some degree of clinical improvement at the end of the study. The mean investigator- and patient-evaluated improvements were 27.75% (10.2–45.3, 95% CI) and 37.35% (20.8%–53.9%, 95% CI), respectively. The average clinical improvement was rated at 21% by the investigator and 29% by patients. Adverse effects were mostly limited to transient erythema and pain during treatment (n = 3). One patient had a blister that healed within a few weeks. No patients experienced any downtime associated with their treatments.

Conclusions: The combination of diode laser (900 nm) and radiofrequency energies is safe and effective in treatment of perioral wrinkles. Further clinical work is needed to determine the optimal settings.