

Treatment of Gingival Pigmentation with Er,Cr:YSGG Laser

G. Berka, K. Aticib , N. Berkç

a Dentist in private practice, DENTA FORM, Ankara, Turkey

b Periodontologist in private practice, DENTA FORM, Ankara, Turkey.

c Orthodontist in private practice, DENTA FORM, Ankara, Turkey.

Purpose: Melanin hyperpigmented gingiva is an esthetic problem in many individuals, particularly if the hyperpigmentation is on the facial aspect of gingiva and visible during smile and speech, especially in patients with gummy smiles. Gingival depigmentation has been carried out using surgical, chemical, electrosurgical, and cryosurgical procedures. The two cases presented here show the successful depigmentation using an Er,Cr:YSGG laser, and a short follow-up period (6 months) for repigmentation results.

Materials and Methods: An Er,Cr:YSGG hydrokinetic system laser set at 20 Hz, 1.75 W to 1.5 W, with 20% to 40% air and 12% to 5% water spray was used for removal of pigmented gingiva in 2 patients. The pigmented areas were treated in noncontact mode, and both cases were completed during one appointment.

Results: Even though both cases were performed without any anesthesia, no intra-operative or postoperative pain or discomfort appeared. After 24 h, the lasered gingiva was partly covered with a thin layer of fibrin, which exfoliated during the first week following treatment. The ablated wound healed almost completely within 1 week.

Conclusion: These results pointed out that YSGG laser is a good and safe choice for removal of pigmented gingiva without local anesthesia. The postoperative period is comfortable for the patient and healing is fast and good. No repigmentation occurred in either patient after 6 months.

Keywords: Er,Cr:YSGG laser, hyperpigmentation, hydrokinetic system, depigmentation.

J Oral Laser Applications 2005; 5: 249-253.