

Gingival Depigmentation: A Case Report

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ABSTRACT

Gingival pigmentation which is caused by deposition of melanin pigment is a major esthetic concern for many people. Though, it is not a medical problem, many people complain of dark gums as non-esthetic. Esthetic gingival depigmentation can be performed in such patients with excellent results. A case is reported here in which a simple and effective surgical depigmentation was performed with a scalpel surgery.

Key Words: *Gingival depigmentation, Gingiva, Melanin*

INTRODUCTION

A major esthetic concern for many people is gingival melanin hyperpigmentation. Melanin pigmentation is known to be caused by melanin granules within the gingival epithelium.¹ Melanin hyperpigmentation does not present a medical problem, but patients usually complain of dark gums as unaesthetic. This problem is aggravated in patients with a “gummy smile” or excessive gingival display while smiling. Esthetic periodontal plastic surgery is especially rewarding in such individuals with compromised esthetics. A case is reported here on the cosmetic correction of “black gums”.²

CASEREPORT

An 18-year-old male patient visited the department of Periodontics and Oral Implantology, Santosh Dental College, Pratap Vihar, Ghaziabad with the chief complaint of blackish gums (Fig. 1). Oral examination revealed pigmented gingiva from right first premolar to left first premolar in maxillary in mandibular region. The patient requested for esthetically better gums, a scalpel surgery was planned to perform the depigmentation. The entire procedure

was explained to the patient and written consent was obtained. To rule out any contraindication for surgery, a complete medical examination, family history and blood investigations were done. Oral prophylaxis was done before the surgery. Local anesthesia was infiltrated in the maxillary and mandibular anterior region from premolar to premolar (lignocaine with adrenaline in the ratio 1:2,00,000). A bard parker handle with a no. 15 blade was used to remove the pigmented layer (Fig. 2). After removing the entire pigmented epithelium along with a thin layer of connective tissue with the scalpel, the exposed surface was irrigated with saline. Periodontal dressing was placed at the surgical area. Patients were prescribed amoxicillin and clavulanic acid (625 mg tds for 3 days), diclofenac potassium 50 mg + paracetamol 325 mg + serratio –peptidase 10 mg for 3 days. Chlorhexidine mouth gargle was advised 3-4 times a day for two weeks. The healing process was proceeding normally and patient did not report any discomfort. At the end of one month, re-epithelialization was complete and healing was found to be satisfactory. At the end of six months, the gingiva appeared healthy and no further repigmentation was seen (Fig. 3).



Fig. 1: Gingival melanin pigmentation



Fig. 2: Removal of pigment layer



Fig. 3: Six months post-operative

DISCUSSION

The surgical removal of undesirable pigmentation using scalpels is one of the first, and still popular techniques to be employed. The procedure essentially involves surgical removal of gingival epithelium along with a layer of the underlying connective tissue and allowing the denuded connective tissue to heal by secondary intention. The new epithelium that forms is devoid of melanin pigmentation.^{3,4,5} In this particular case the scalpel method of depigmentation showed better results from both clinical and patients point of view. The area healed completely in 10 days with normal appearance of gingiva.⁵ the use of scalpel technique for depigmentation is the most economical as compared to other techniques, which require more advanced armamentarium. However, scalpel surgery causes unpleasant bleeding during and after the operation, and it is necessary to cover the surgical site with periodontal dressing for 7-10 days. Though the initial result of the depigmentation surgery is highly encouraging, repigmentation is a common problem.⁶

CONCLUSION

The depigmentation procedure was successful and the patient was satisfied with the result. Treatment of gingival hyperpigmentation with scalpel technique to be relatively simple and easy to perform as also cost-effective. Above all, it causes less discomfort and is esthetically acceptable to the patients.

REFERENCES

1. Dr Rizwan Sanadi, Dr Namrata Suthar, Dr B.M.Bhusari, Dr Laksha Chelani. Gingival Depigmentation Using Scalpel Technique versus Laser Technique: A Case Report. IOSR Journal of Dental and Medical Sciences (IOSR-JDMS) E-ISSN: 2279-0853, P-ISSN: 2279-0861. Volume 14, Issue 8 Ver. Ii (Aug. 2015), Pp 38-40.
2. SSV Prasad, Neeraj Agrawal, Nr Reddy. Gingival Depigmentation: A Case Report. People's Journal of Scientific Research. Vol.3(1), Jan 2010.
3. Cobb Cm. Lasers in Periodontics: A Review of the Literature. J Periodontol 2006;77:545-564.
4. Stabholz A, Zeltser R, Sela M, Peretz B, Moshonov J, Ziskind D, Stabholza.: The Use Of Lasers In Dentistry: Principles Of Operation And Clinical Applications. Compend Contin Educ Dent, 2003; 24(12): 935-948.
5. Chirayu Shah, Rahul Dave, Monali Shah, Deepak Dave. Evaluation of Scalpel versus Diode Laser for Gingival

- Depigmentation: A Case Report. International Journal of Advanced Health Sciences | June 2014 | Vol 1 | Issue 2.
6. Sharmila Verma, Meera Gohil, Vandana Rathwa. Indian Journal Of Clinical Practice, Vol. 23, No. 12, May 2013.