



TREATMENT OF HYPERPIGMENTED GUM – A PARADIGM SHIFT

Periodontics

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ABSTRACT

Hyperpigmentation of gingiva is a benign physiologic condition but deserve attention due to its aesthetic importance. Various techniques have developed to manage this hyperpigmentation problem. Those are mainly scalpel technique, rotary bur abrasion, electro cautery and laser treatment. All the techniques have their pros and cons. Final outcome of the all the methods are good and comparable. Of late there is a definite trend, opting for laser technique both from patients and surgeons though it is expensive than other techniques. Here we present our experiences treating 55 patients with gingival hyperpigmentation in our Institute.

KEYWORDS

Gingival Hyperpigmentation, Depigmentation, Scalpel, Bur, Electrocautery, Laser.

INTRODUCTION

The gingival hyperpigmentation is a physiologic condition and depends upon the number and size of vasculature, epithelial thickness, degree of keratinization and pigments within the gingival epithelium.¹ It does not cause any symptom and management of the gingival hyperpigmentation primarily depends upon patient's aesthetic expectations.² Gingival depigmentation is done by various techniques.³ In our set up, gingival depigmentation is done by Scalpel, abrasion by rotary Bur, Electrocautery, and Laser. All those techniques have their advantages and disadvantages. Here we present our experiences over last three years treating those patients in our institution.

MATERIALS AND METHODS

Over last three years we treated 55 patients with hyperpigmentation of the gum. All the patients were having physiologic hyperpigmentation and sought treatment for aesthetic consideration. Age of the patients were between 18 to 30 years. There was male predominance, 30 male(M) and 25 were female(F). Among them 32 patients (M 17, F 15) treated with Laser. (Figure 1,2,3 & 4). Scalpel ablation carried out in 8 patients (M 4, F 4). (Figure 5,6,7 & 8). Bur ablation done in 7 patients (M 4, F 3) (Figure 9,10,11 & 12) and electro cautery done in 8 patients (M 5, F 3) (Figure 13,14,15 & 16).

Initially it was particular consultant surgeons' preference to select the procedure of his choice. But in the last two years more and more patients opted for laser therapy. Though expensive, patient compliance was much better following laser therapy than other procedures. They required less amount of analgesic and had less working day loss. From the surgeons part it is less time consuming and clear operative field. All the patients were in regular follow up and final outcome of the patients were very satisfactory, irrespective of the techniques employed.

DISCUSSION

Physiologic hyper pigmentation of the gum is an asymptomatic condition. Various depigmentation procedure is being employed are purely for aesthetic consideration of the person. All the techniques we used have their merits and demerits. Scalpel method is inexpensive, simple, can be perform in a basic set up. But there is visibility problem during the procedure due to blood in the operating field, post operative pain and it is time consuming. In Bur ablation there are also operative field visibility problem. Chances of damage of the local healthy tissues like tooth and periosteum are there. Electrocautery does not have visibility problems during procedure but chances of thermal injury to the surrounding normal tissue are there. Laser is expensive, needs proper set up, but it is less time consuming, no operative field visibility problem, much less post operative pain – require less analgesics. Patient compliance is much better following laser therapy than other

procedures. Minimum working day loss as well as requirement of less analgesic medication appeared to be a very important consideration for patients to opt for laser therapy. Another thing noticeable in our study is male preponderance, though the general belief is that females are more aesthetic concerned.

CONCLUSION

In spite of expensive, laser therapy for gingival hyper pigmentation has scored over other time-honoured techniques. This perhaps due less operating time, good patient compliance and less loss of working days.



Figure 1: Preoperative



Figure 2: Intraoperative



Figure 3: Immediate Postoperative



Figure 4: 14 days Postoperative



Figure 5: Preoperative



Figure 6: Intraoperative



Figure 7: Immediate Postoperative



Figure 8: 14 days Postoperative



Figure 9: Preoperative



Figure 10: Intraoperative



Figure 11: Immediate Postoperative



Figure 12: 14 days Postoperative



Figure 13: Preoperative



Figure 14: Intraoperative



Figure 15: Immediate Postoperative



Figure 16: 14 days Postoperative

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