

Background & Aim Results

Gingival pigmentation (black gingiva) is considered as one the most common esthetic problems particularly in patients with a very high smile line (Gummy smile),so that the healthy pink gingiva appearance is now one of the people's required demand beside the shape and the color of teeth.

The traditional method with scalpel was carried out in this case to remove the gingival pigmentation of maxilla, then bluem oxygen gel was applied as a dressing on the right quadrant ,while non-eugenol dressing coe-pack was applied on the left quadrant.

The aim of this presentation is to report the efficacy of active oxygen on gingival wound healing, re-epithelization index , pain index and patient perceptions.

Case Report & Results

25 years old female patient with non-contributory medical history, non-smoker, complaining of sever gingival melanin pigmentation (score 3) of the maxillary labial gingiva, visited the department of Periodontology – Damascus University:

Gingival depigmentation was planned and the treatment stages were arranged as :

- 1-Surgical depigmentation of the right and the left quadrants with 1 week interval in order to register pain index.
- 2-Pain ,wound healing , re-epithelization (by applying toluidine blue)and patient perception were evaluated as shown below :



Fig. 1 – pre-operation

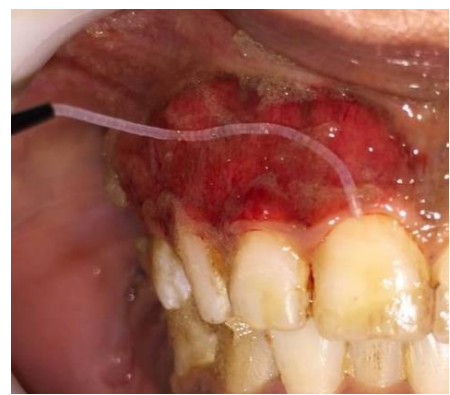


Fig. 2 – after surgery and application of bluem gel



Fig. 3 – after surgery



Fig. 4 –after coe-pack application



Fig. 5 –1 week after bluem gel application



Fig. 6 –1 week after coe-pack application



Fig. 7 –2weeks after bluem gel application



Fig. 8– 2 weeks after coe-pack application



Fig.9– 3 weeks after bluem gel application



Fig.10– 3 weeks after coe-pack application

Table 1 Clinical Evaluation Score

Evaluation	Score			
-Pain	A. none	B. slight	C. moderate	D. sever
Woud healing	A. complete epithelization		B. incomplete pithelization	
	C. ulcer		D. tissue defect or necrosis	
-Patient discomfort	A. comfortable		B. discomfortable with applying dressing	

Table 2 Clinical evaluation of BlueM gel and Coe-Pack dressings

Evaluation after 1 week	BlueM gel	Coe-Pack
-Pain	B	C
Wound healing	B	B
Patient discomfort	A	B

Table 3 Clinical evaluation of BlueM gel and Coe-Pack dressings

Evaluation after 2 weeks	BlueM gel	Coe-Pack
-Pain	A	B
Wound healing	A	B

Table 4 Clinical evaluation of BlueM gel and Coe-Pack dressings

Evaluation after 3 weeks	BlueM gel	Coe-Pack
-Pain	A	A
Wound healing	A	A

Conclusion

The reported clinical case suggest that oral oxygen gel (BlueM) optimizes the process of tissue healing , its benefits include ease of applying by surgeon, general dentist and patient instead ofthe traditional dressing , decreased pain and discomfort , accelerate the complete epithelization , the patient was satisfied with the outcome which is the ultimate goal of any Therapy.

References

1. Costin, Gertrude-E and Vincent J, The FASEB journal Hearing (2007). "Human skin pigmentation: melanocytes modulate skin color in response to stress." 21(4): 976-994.
2. Dryden MS, Cooke J, Salib RJ, Holding RE, Biggs T, Salamat AA et al. Reactive oxygen: a novel antimicrobial mechanism for targeting biofilm-associated infection. J Glob Antimicrob Resist 2017; 8:186-91.