

Primary Intention Wound Healing and Esthetic Restoration in a Lacerated Lip Wound: The Hidden Drama, the Dynamics of Healing Process and Unanticipated Clinical Outcomes

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Case Report

This is a beautiful case of a patient who reported to the Outpatient Department with a deep-seated, lacerated wound on the lip apart from several minor abrasive injuries over the entire maxillo-facial region. The patient was conscious, well-oriented to time and place and very cooperative for clinical examination. On history elicitation, the patient gave a history of fall from a bike, a road transport accident (RTA) following which the patient along with the attendant rushed to the Centre for needful. On palpation, though the patient was found anxious and responded with pain, there was no clear-cut evidence found of any bony fracture in the maxillo-facial region although avulsion was noted in relation to tooth no.#11 while Ellis class II fracture in relation to tooth no.#21 which was later, also, confirmed by the orthopantomograph (OPG) of the patient and other requisite views taken immediately after clinical examination of the patient including a para-nasal sinus view to check for evidence of any fractures in the concerned maxillo-facial region. The patient's lip was found to be badly lacerated (FIG. 1,2) for which healing by first intention was attempted by the vigorous cleaning of the wound area followed by induction of fresh bleeding and going for a clean, approximation of the lacerated tissues with support from external bandaging [1-5]. The patient was given injection of anti-tetanus serum (ATS) and was prescribed an antibiotic-anti-inflammatory coverage for 7 days. The patient was kept on a regular follow-up and for periodic reevaluation of the healing lip wound (FIG. 3-9). Splinting was done to restrict mobility of the teeth in the anterior maxillary region followed by which an orthopantomograph (OPG) was taken (FIG.10,11). The results were found to be highly surprising on a meticulous follow-up of the patient. The healing was found to be uneventful and the patient's esthetics were, also, eventually, surprisingly, restored (FIG. 12,13). The need for any surgical procedure for the re-approximation of the lacerated wound, which has often been reported with an unesthetic

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scarring and retraction of the lip tissues, was, thus, completely bypassed [6-11]. The patient was kept on follow-up for evaluation and further needful including the dental procedures required for the fractured tooth and the prosthetic rehabilitation of the avulsed tooth. The present case, thus, needs a mention in the literature and highlights the success of an attempt towards inducing healing by primary union (healing by first intention) in the lacerated facial tissues which can be used in other similar wounds, if required, and permitted by the situations under a strict, anti-infective environment and with maintenance of cleanliness in the wound apart from a meticulous follow-up and periodic re-evaluation of the patients [12-15]. The images presented have been acquired on follow-up of the patient on subsequent visits for reference.



Fig. 1

Fig. 2

Fig. 3

FIG. 1. Immediate Post-trauma- Facial Profile View, FIG. 2. Immediate Post-trauma- Closer View and FIG. 3. 4-days Post-trauma- Facial Profile View.



Fig. 4

Fig. 5

Fig. 6

FIG. 4. 4-days Post-trauma- Closer View, FIG. 5. 6-days Post-trauma- Facial Profile View and FIG. 6. 6-days Post-trauma- Closer View.



Fig. 7

Fig. 8

Fig. 9

FIG. 7. 68-days Post-trauma- Closer View, FIG. 8. 8-days Post-trauma Intra-oral Closed Mouth View with Teeth in Occlusion and FIG. 9. 8-days Post-trauma Intra-oral Open Mouth View.



Fig. 10



Fig. 11

FIG. 10. 3-weeks Post-trauma Intra-oral Closed Mouth View showing splinting done in anterior maxillary region, FIG. 11. Orthopantomograph of the patient 3-weeks Post-trauma revealing splinting done in the anterior maxillary region.



Fig. 12



Fig. 13

FIG. 12. Facial Profile View at 4-weeks, FIG. 13. Closer View at 4-weeks.

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