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Letter to Editor

Two cases of vermilion sliding flap repair for lip injury with soft tissue defect

Keywords:
Facial injury
Lip defect
Repair and reconstruction
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To the editor,

Every year, approximately 3000 cases of oral and maxillofacial injury are received and treated in the dental emergency department of hospitals, including about 60% of cases involving lip injury.[1] At present, the commonly used repair and reconstruction methods in clinical practice include the direct apposition suturing, local adjacent flap, distal flap, and other repair methods.[2–5] The two cases presented in this paper are of upper and lower lip vermilion defects. They are repaired by a vermilion sliding flap under local anesthesia with a latent wound and a small local trauma.

A patient visited the doctor due to facial injury and the treatment lasted 4 h. There were mucosal contusions and lacerations of the upper lip,a small part involving the skin; some of the soft tissue was defective, with an area of about 2.5*1 cm and uneven wound borders; some of the labial gland tissue and muscle tissue were exposed and the severed blood vessels were accessible; there was a small amount of active bleeding with no obvious foreign matter (Fig. 1A).

Treatment process (Fig.1Ba-d):The inside and outside of the mouth was disinfected and covered with surgical drape for debridement. An incision was made along the vermilion border on both sides of the defect to cut inward the full-thickness of skin, muscle, and mucosa while protecting the labial artery. The length of the incision was determined according to the criteria that two free ends of vermilion could be connected with low tension. The wound border was trimmed, and the skin and mucosal layer were brought together and sutured with 6–0 Prolene sutures.

Re-examination:It was observed that after Three days (Fig.1Ca), five days (Fig.1Cb), and three months of the operation (Fig.1Ccd), the wound healed, was not obviously visible, the dynamic and static appearance of the lips was acceptable, and the patient was satisfied.

A patient visited the doctor due to a bite on the lower lip, and the treatment lasted 6 h. The skin and mucosa of the lower lip were bitten and defective, with an area of about 3.5*2 cm; part of the vermilion mucosa was free; there was a small amount of oozed blood, with no obvious foreign matter (Fig. 1D).

Treatment process (Fig.1Ea-c):The inside and outside of the mouth was disinfected and covered with surgical drape for debridement. The free vermilion was aligned; an incision was made along the vermilion border on the left side of the defect to cut inward the full-thickness of skin, muscle, and mucosa while protecting the labial artery. First, the vermilion was aligned and sutured, and the range of the remaining skin defect was observed; a V-shaped incision was made to cut the full-thickness of the skin and mucosa, and the skin and mucosal layer were aligned and sutured with 6–0 Prolene sutures. The integrity of the vermilion tissue was restored immediately after the operation (Fig.1 Ede).

Re-examination:It was observed that after two days (Fig.1 Fab), four days (Fig.1Fcd), six days (Fig.1Fef), and one month of the operation (Fig.1Fgh), the wound healed well, and the dynamic and static shape of the lower lip was harmonious and beautiful.

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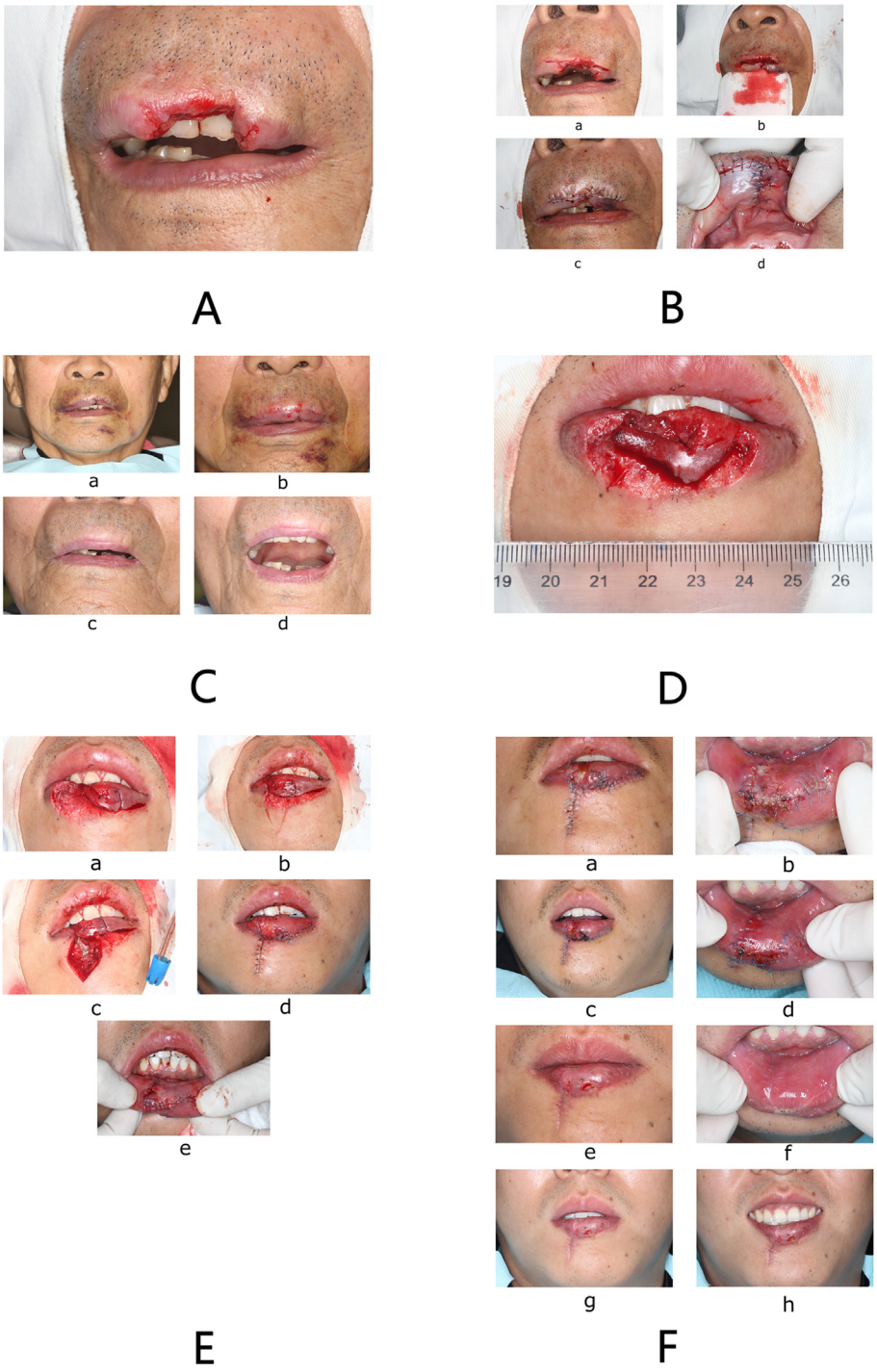

Fig. 1. AOral image of case 1
1B: Upper lip reconstruction procedure
1C: follow-up of case 1
1D: Oral image of case 2
1E: lower lip reconstruction procedure
1F: follow-up of case 2.

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Ethics approval and consent to participate

The study was conducted in accordance with the Declaration of Helsinki (as was revised in 2013). The study was approved by Ethics Committee of our hospital. Written informed consent was obtained from all participants.

Declaration of competing interest

The authors declare that they have no competing interests.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.asjsur.2023.03.081.

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