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Case Report

Karapandzic flap: A case-report

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ABSTRACT

For full-thickness lip defects, the choice of reconstructive option depends on the size of the defect. Defects of one-quarter to one-third of the upper lip can be closed primarily. Larger defects measuring one-third to two-thirds of the lower lip width may be closed with the Karapandzic, Abbe or Estlander flaps. If the commissure is involved, both the Karapandzic and Estlander flaps may be used; however, the Karapandzic is probably the better choice because it is better at maintaining oral competence. In the case of larger lower lip defects (more than two-thirds of the lip), if there is sufficient adjacent cheek tissue, the surgeon may employ the Karapandzic (for defects up to three-fourths of the lower lip width) or the Bernard-Burow's techniques (to reconstruct the entire lower lip). A case of post-traumatic, lower lip defect, reconstructed with a bilateral karapandzic flap is presented here.

1. Introduction

The lips are not only a major esthetic component of the face, but are also important for facial expression, speech and eating. Goals in lip reconstruction are to restore normal anatomy, oral competence and contour. These goals are easily attained following repair of small lip defects. However, restoring these characteristics of the lips in large defects remains a more arduous task.

2. Karapandzic flap

This is a sensate axial musculomucocutaneous flap based upon the superior and inferior labial arteries. It provides good oral competence and is useful for closing one-half to two-third defects of the upper lip and defects up to three-quarters of the lower lip. It is ideal in situations where no new lip tissue is required in central defects or lateral defects that involve the commissure. The blood supply is more robust than the Abbe flap, but the esthetic outcome is inferior. Because new lip tissue is not recruited, microstomia may result after closure of larger defects.

3. Technique

A semicircular incision of adequate length to close the defect is extended from the defect toward the commissures. The skin incisions are made with a scalpel, and careful mobilization of subcutaneous tissues is achieved using electrocautery. By spreading the orbicularis oris muscle longitudinally along the

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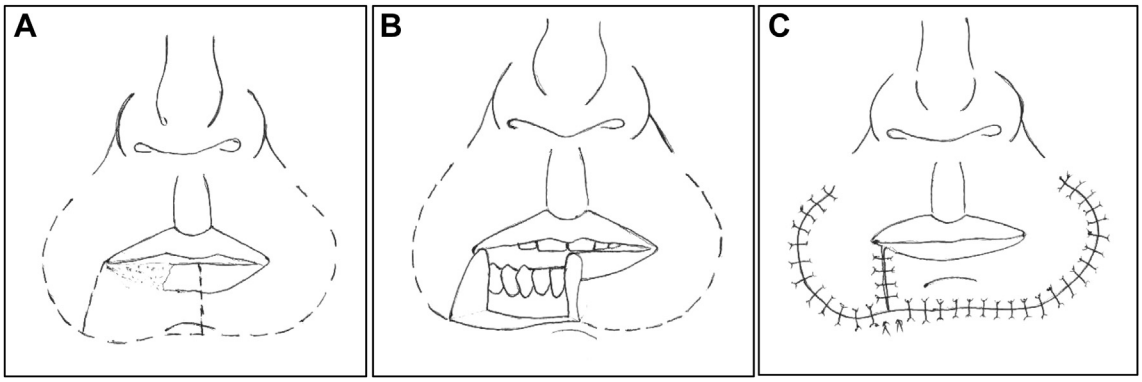

Fig. 1 – Schematic representation of the Karapandzic flap procedure. (A) Outlining of the surgical defect and the flap. (B) The lesion excised/surgical defect created/recipient site prepared. (C) Bilateral Karapandzic flaps sutured in place.

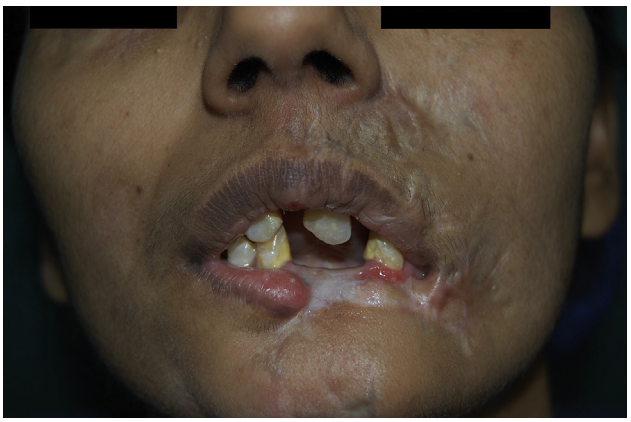

Fig. 2 – Pre-operative photograph.

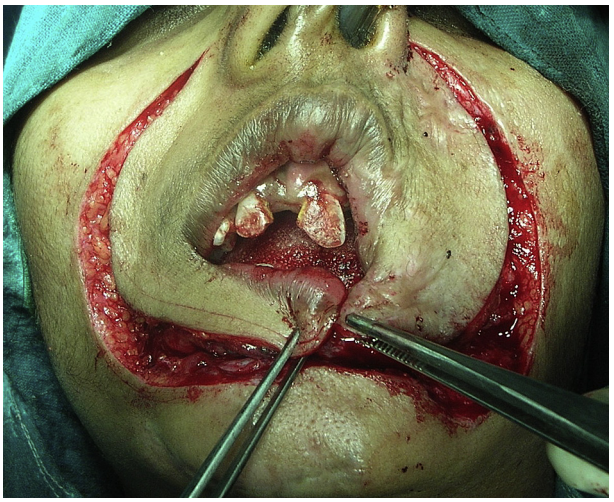

Fig. 4 – Intra-operative photograph showing harvested bilateral karapandzic flaps to be apposed in position.

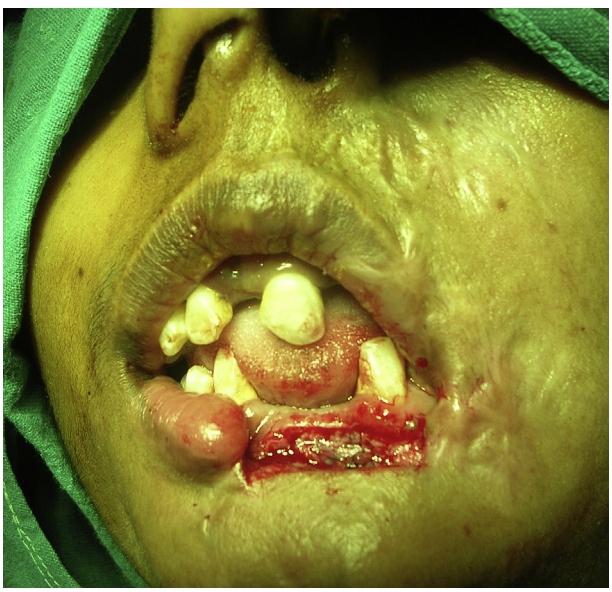

Fig. 3 – Intra-operative photograph showing preparation of the defect for coverage by adjacent flaps.

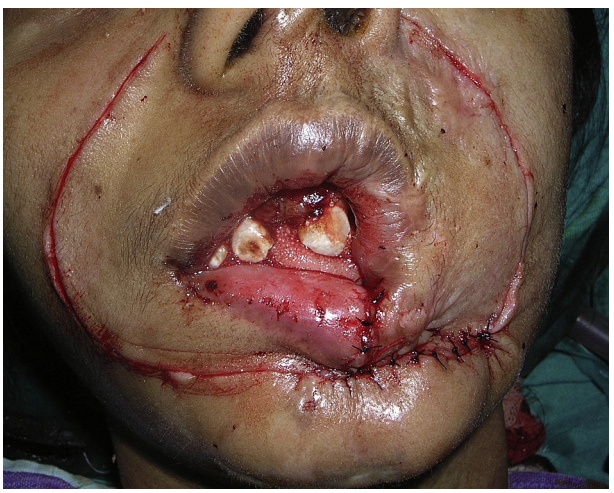

Fig. 5 – Both flaps sutured in position

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