

Bilateral Labiomental Fan Flap; An Alternative Technique for One-Stage Total Lower Lip Reconstruction

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Background;

Lower lip reconstruction poses a particular challenge to the Maxillofacial Surgeon. As the major expressive component of the lower third of the face, preservation of both aesthetics and function is imperative. The most challenging reconstruction techniques involve major defects of >80% of the lower lip.

There are many reconstructive techniques described using the remaining lip and local flaps to restore the lower lip dependent upon the size of the defect. Furthermore, no single technique has emerged as the 'accepted standard' and numerous modifications to existing surgical techniques continue to be documented in the literature.

This case report describes the use of a novel one-stage bilateral labiomental fan flap for total lower lip reconstruction.

Method;

The authors applied their new reconstructive technique to an 81 year-old male with an extensive lower lip defect following excision of a fungating squamous cell carcinoma. Bilateral full thickness labiomental flaps were advanced and rotated to close the lower lip. A combination of mucosal advancement and free mucosal grafting was employed to reconstruct the lower vermillion.

The advantages of our technique compared to the previously described techniques are as follows;

- (1) Total preservation of upper lip anatomy (orbicularis oris and associated neurovascular structures)
- (2) Preservation of lower lip anguli muscles and the use of well vascularized tissues thereby providing a recreating the oral sphincter, restoring oral competence and minimizing microstomia

To our knowledge, this full thickness bilateral labiomental fan flap has not been described in the literature previously.

Results;

The functional and aesthetic results following this flap reconstruction are acceptable. At 4 weeks post-operatively, our patient had good lower lip movement and sensation, near-normal mouth opening and function, total re-epithelization of the mucosal deficit and is extremely pleased with the aesthetic outcome. No further corrective surgery is deemed necessary.

Conclusion;

The authors conclude that this is a simple and easy to perform, one-stage technique that is associated with minimal morbidity and achieves acceptable outcomes for total lower lip reconstruction.