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The "Unpleasant" Smile

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ABSTRACT / A simple procedure is described to correct what the authors call the unpleasant smile. The procedure consists of "hiding" the excessively visible upper arch mucosa exposed during smiling, and it usually solves the aesthetic problem in patients who reject a more complicated maxillofacial approach. Basically, the technique involves creating a synechia between the upper lip and the periosteum of the maxillary arch. This synechia eliminates overexcursion of the lip during smiling.

In addition to static harmony of the features, facial beauty requires beauty during movement; and the smile is the most important dynamic feature of the face (3). Even a face that fits accepted canons of beauty (7) is enhanced by the charm of an attractive smile. Although no set pattern of elements constitutes an ideal smile, one necessary factor is that only a very narrow strip of mucosa be visible above the teeth. More than this is unpleasant. This unpleasant smile is caused mainly by a mild maxillary and/or dentoalveolar protrusion and a real or relatively short upper lip, which leave a wide gingival area exposed above the dentoalveolar line.

Several maxillofacial surgical techniques have been proposed to correct this deformity by bony repositioning of the prodontia (1, 4–6, 9, 10). But as our patients have pressed us for a simpler solution, we have considered a different approach to the problem and have developed a simple corrective operation.

Surgical Principle

The operation is based on excision of a strip of mucosa from the labial surface of the upper alveolar process (Fig. 1A). To close the wound, the surgeon fashions a wide flap from the vestibular aspect of the upper lip, which is turned down and sutured to the lower border (Fig. 1B). The raw surface between the upper alveolar periosteum and the upper lip muscles is thus sealed (Fig. 1C). This synechia eliminates the "overexcursion" of the lip during laughter, yawning, or smiling.

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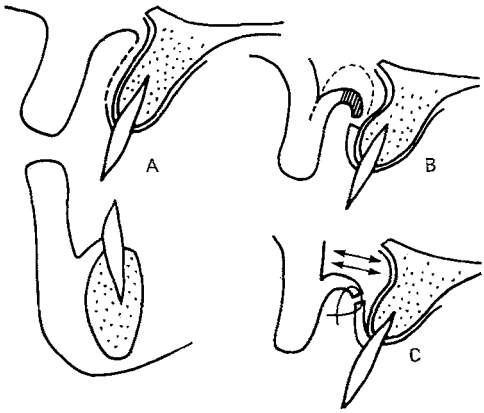

Fig. 1. (**A**) Dotted line indicates the amount of gingiva to be removed. (**B**) Flap is turned down; it can be trimmed if necessary. (**C**) Flap is sutured, allowing the synechia to form (arrows).

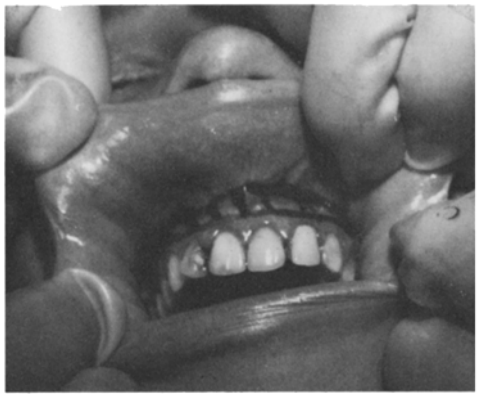

Fig. 2. Outline of the gingival strip to be removed.

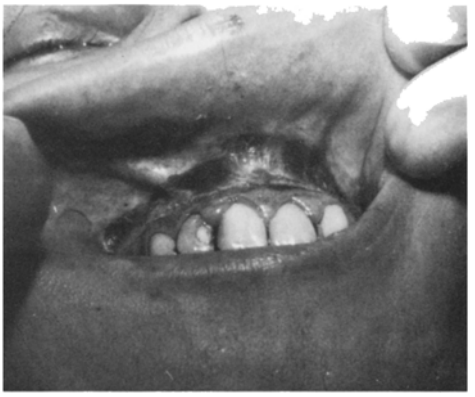

Fig. 3. The excision is completed.

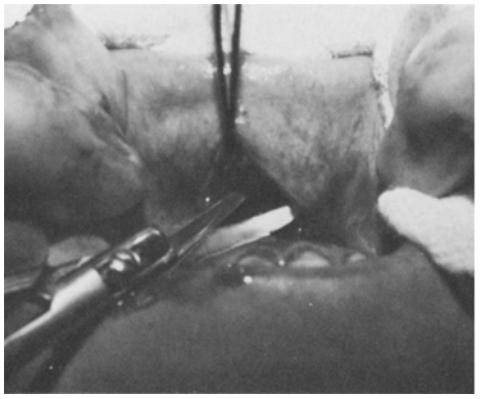

Fig. 4. The labial flap is undermined.

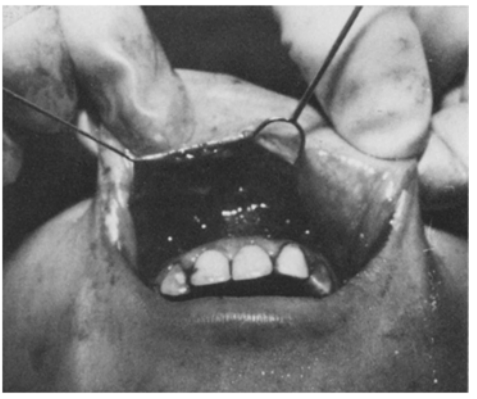

Fig. 5. The flap is raised to show its extent and undersurface.

Surgical Technique

Under adequate preanesthesia, a bilateral infraorbital block is performed. Complementary submucosal local infiltration with a xylocaine-epinephrine solution aids the undermining and provides a clean surgical field. The horizontal strip of mucosa to be resected is designed. The lateral angles should be at the projection of the labial commissures during smiling, approximately above the second molars. The upper border of this strip is the fundus of the upper buccal sulcus, and the lower border parallels it 2 to 3 mm above the dentoalveolar line (Fig. 2).

The strip of mucosa is then removed, leaving the periosteum intact (Fig. 3). The upper wound edge is undermined as a wide flap, which includes both mucosal and submucosal layers of the upper lip (Figs. 4 and 5). This flap is then advanced and sutured to the lower wound border with interrupted 4—0 silk sutures (Fig. 6). The frenulum is reconstructed by vertically folding the flap in the midline and holding the position with several U stitches. Plaster or adhesive tape is applied over the lip to immobilize it for 7 days (Fig. 7).

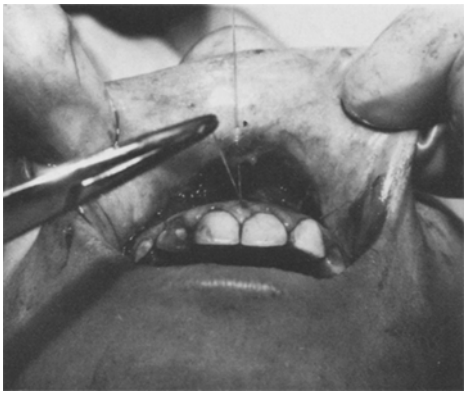

Fig. 6. The flap is sutured. The first stitch is for the frenulum.

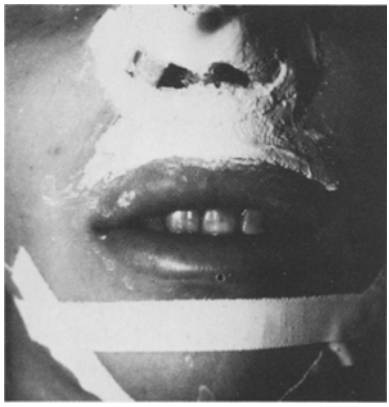

Fig. 7. Plaster or adhesive tape is applied over the lip (rhino- and mentoplasty were done in one operation in this patient.)

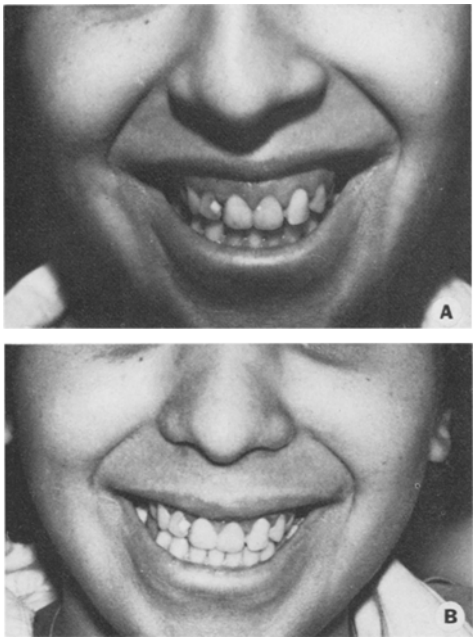

Fig. 8. Pre- (**A**) and postoperative (**B**) photographs.

Fig. 9. Pre- (**A**) and postoperative (**B**) photographs.

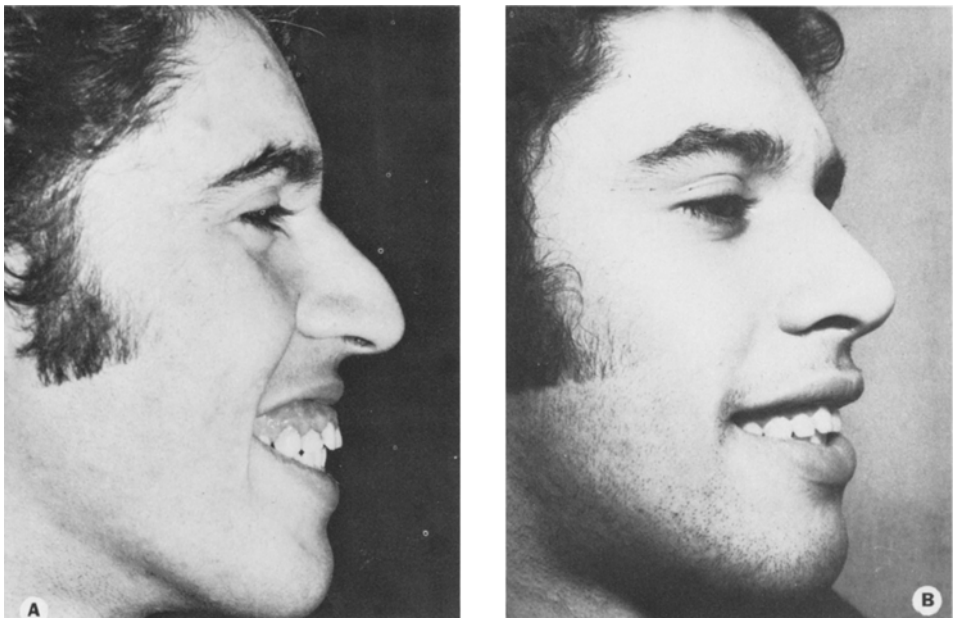

Fig. 10. Pre- (**A**) and postoperative (**B**) photographs.

The patient is instructed to rinse his mouth without brushing his teeth, and postoperative care is as for all intraoral surgery. The lip remains difficult to move and swollen for a week, but it rapidly recovers afterward. The only complication we have noted is some pain during the first week, but it subsides spontaneously.

In a few cases the excision was too conservative and there was some recurrence, necessitating a secondary revision. All our 92 cases improved satisfactorily. Pre- and postoperative views of 3 patients are shown in Figures 8, 9, and 10.

Summary

A simple procedure involving mucosal resection only is proposed to correct the "unpleasant smile" caused by mild maxillary and/or dentoalveolar protrusion and short upper lip. This operation can be combined with rhino- or mentoplasty. The psychosocial results are highly gratifying to both patients and surgeons.

References

1. Bell, B.H. and Condit, C.L.: Surgical-orthodontic correction of adult bimaxillary protrusion. J. Oral Surg. 28:578, 1970.

2. Bell, B.H. and Levi, B.M.: Healing after anterior maxillary osteotomy. J. Oral Surg. 28:728, 1970.
3. Bell, C.H.K.: The Anatomy and Philosophy of Expression as Connected with the Fine Arts, Ed. 5. H.G. Bohn, London, 1865.
4. Colantino, R.A. and Dudley, T.: Correction of maxillary prognathism by complete alveolar osteotomy. J. Oral Surg. 28:543, 1970.
5. Converse, J.M. and Horowitz, S.L.: The surgical-orthodontic approach to the treatment of dentofacial deformities. Am. J. Orthod. 55:217, 1969.
6. Gimenez, E.: Cirugía de la sonrisa I. Rev. Asoc. Odontol. Arg. 60:59, 1972.
7. Gonzalez-Ulloa, M.: Quantitative principles in cosmetic surgery of the face (profileplasty). Plast. Reconstr. Surg. 29:186, 1962.
8. Khouw, F.E. and Profitt, W.R.: Cephalometric evaluation of patients with dentofacial disharmony requiring surgical correction. Oral Surg. 29:789, 1970.
9. Lyons, B.M.: Surgical correction of bimaxillary protrusion and mandibular retrusion. Oral Surg. 30:1, 1970.
10. Straith, R.E. and Lawson, J.M.: Surgical orthondontia: a new horizon for plastic surgery. Plast. Reconstr. Surg. 39:366, 1967.