

DEGLOVING APPROACH FOR TOTAL EXCISION OF INVERTED PAPILOMA.

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ABSTRACT

Inverted papilloma, because of its insidious and aggressive clinical course, must be completely excised. Previously, the customary procedure advocated for this goal was a lateral rhinotomy. The degloving approach, which consists of lifting the soft tissues from the mid portion of the face, thereby furnishing unlimited exposure to the pyriform fossae and the lateral nasal walls, offers an excellent alternative to the lateral rhinotomy technique.

The degloving procedure involves no external scarring and improves the visibility of the total operative field. En bloc dissection of the lateral nasal wall is then accomplished and extended to include a sphenoidectomy or partial excision of the medial orbital wall, as dictated by the extent of disease.

The procedure has been performed by the authors in 46 cases, and has proved to be an extremely valuable technique, displaying excellent cosmetic and functional results with minimal complications.

The Current trend of partial removal of inverted papilloma should be discouraged, if not condemned. The main impetus for this movement is the desire to spare the patient external scarring, and thus complete the procedure through a restricted intranasal technique. The degloving approach obviates all visible scarring and allows for unlimited exposure to the nasal cavities and mid third of the face, permitting total excision of the inverted papilloma. Furthermore, it is anticipated that this approach will be utilized more frequently for successful management of all tumors of the nasal cavity, nasopharynx, and paranasal sinuses.

Denker and Kahler¹ gained access to the nasal cavity by ex-

tensions of the Caldwell-Luc procedure,² resecting bone from the face of the maxilla and removing the lateral nasal wall. This provided fair local access but exposure was limited by the soft tissues of the lip and nose. The use of the Weber Eergusson incision³ eliminated this exposure problem. However, this method is limited by its unilaterality and extensive midfacial scarring. Conley and Prices reported the original sublabial approach to the nasal and nasopharyngeal areas for excision of related neoplasms.

The degloving approach offers several distinct advantages, including exposure of the operative field and adjacent structures, which allows modification and extension of the initial procedure as dictated by the extent of disease. There is no external scarring, and minimal postoperative complications.

TECHNIQUE

The degloving approach is best conceived as a modified com-

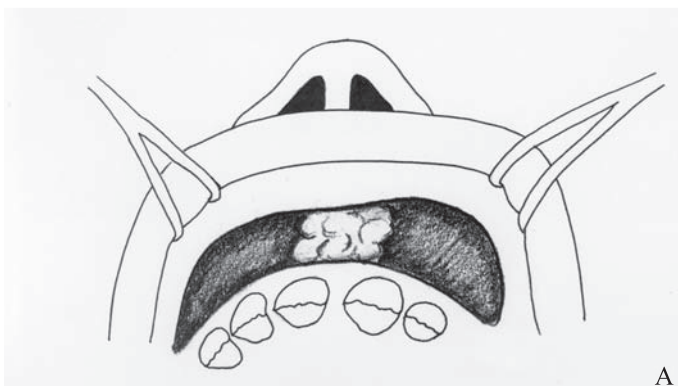


Fig. 1-A. Gingival-buccal and gingival-labial incisions. B. Intraoperative photo.

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Editors Note: This Manuscript was accepted for publication March 9, 1984.

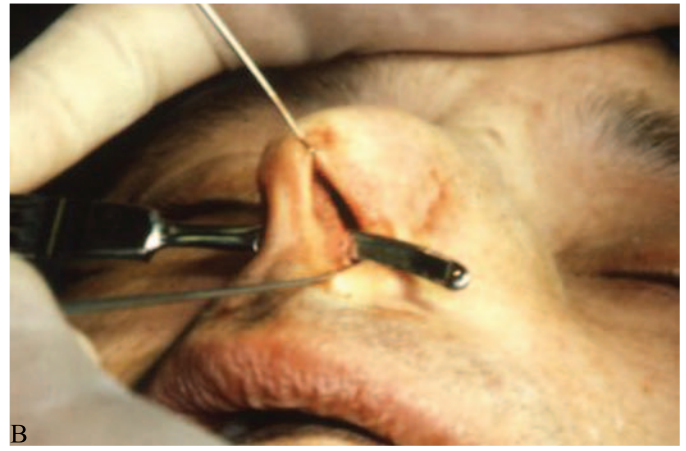
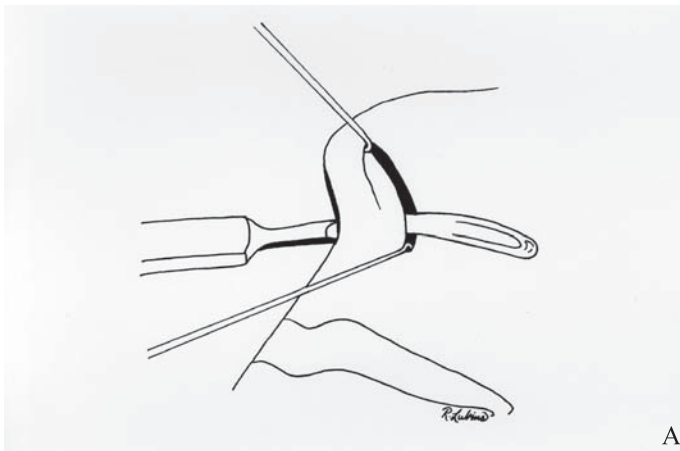


Fig 2-A. Transfixion incision. B. Intraoperative photo.

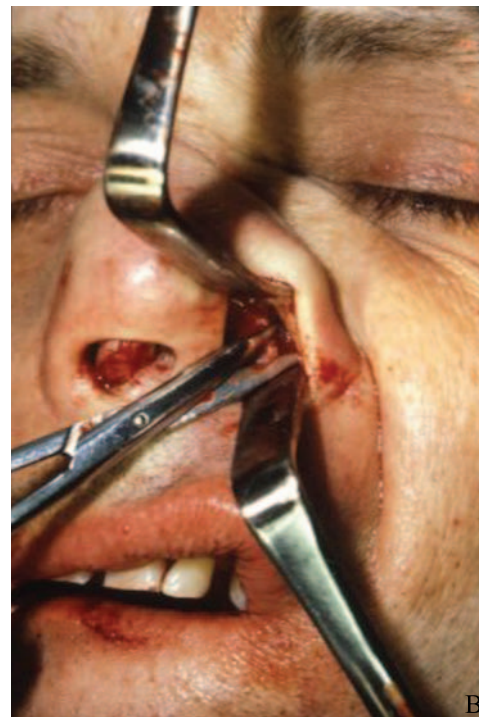
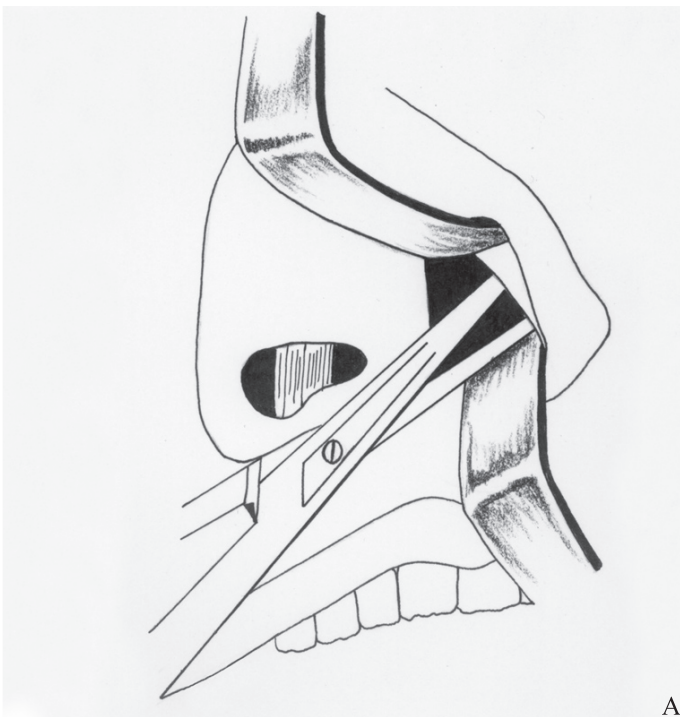


Fig. 3-A. Sharp dissection connecting nasal and anterior facial regions. B. Intraoperative photo.

bination of nasal soft tissue unroofing, coupled with a bilaterally extended Caldwell-Luc incision. Under general anesthesia, Xylocaine® with epinephrine is adjunctively infiltrated into the soft tissue of the nose and buccal incision areas. Additional incisions are located in the gingivallabial and gingival buccal sulci and extend across the midline to the maxillary tuberosity of each side. The incision is carried down to the periosteum, and the soft tissues of the face are freed from the anterior surface of the maxilla up to the face and freed from the visualizing surface of the maxilla up to the infraorbital foramina, visualizing and preserving the infraorbital nerves (Fig. 1).

Routine intercartilaginous incisions are utilized, separating the soft tissue of the nose from the upper lateral cartilages.

Periosteum overlying the nasal bones is elevated as far laterally as possible and superiorly to the root of the nose. Transfixion incision separates the cartilaginous septum from the medial crura of the lower lateral cartilages (Fig. 2). Sharp dissection (Fig. 3) connects the skeletonized nose with the anterior midfacial areas bilaterally accomplishing a total degloving (Fig. 4).

An important consideration at this juncture, before performing the medial maxillectomy and just after the soft tissue degloving procedure, is to plan and incise the lateral nasal mucosa just beyond the anterior pyriform aperture, constructing an inferiorly and superiorly based bipedicle flap of nasal mucosa which is preserved (Figs. 5 and 6). Once this is performed, a routine incision of the lateral nasal wall via a modified medial maxillectomy,



Fig. 4. Complete degloving

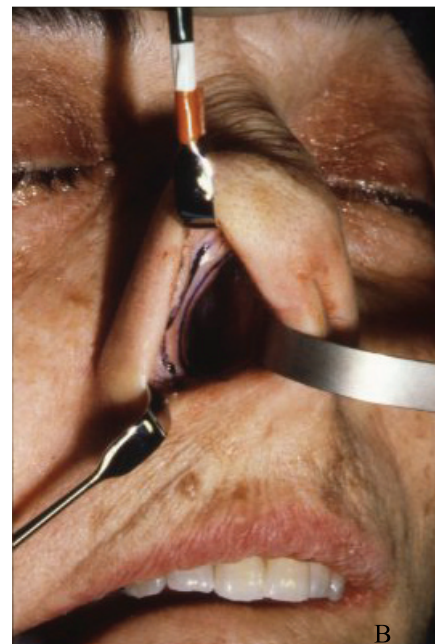
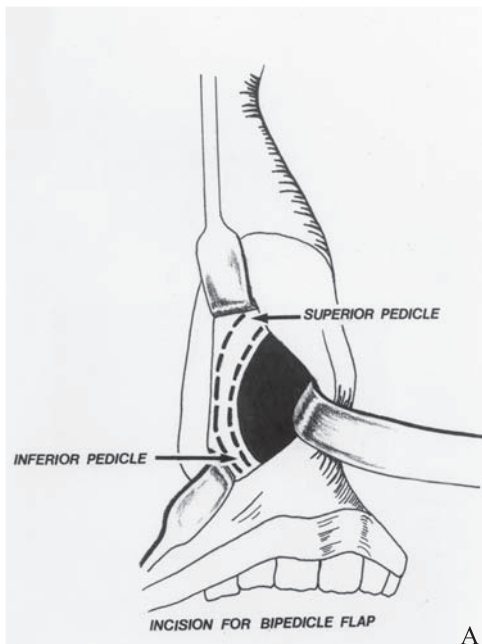


Fig. 5-A. Bipedicle incisions. B. Preoperative outline of bipedicle flap. C. Anterior mucosal bipedicle flap (arrow) after degloving but before bone excision.

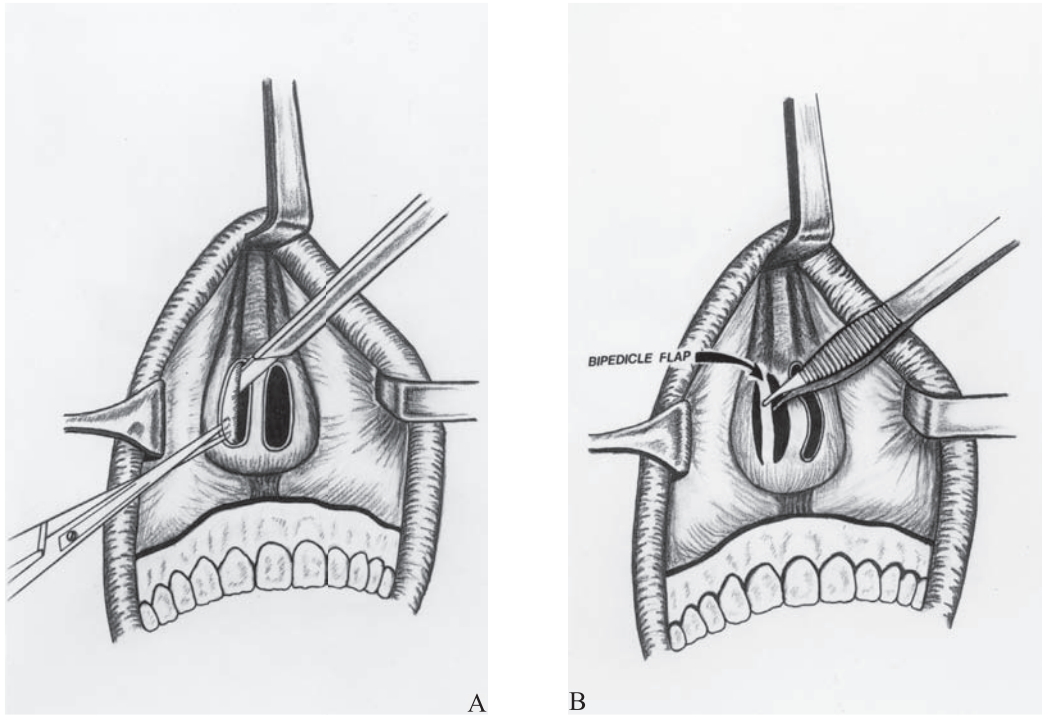


Fig 6-A Sharp dissection of bipedicle flap. B. Completed flap

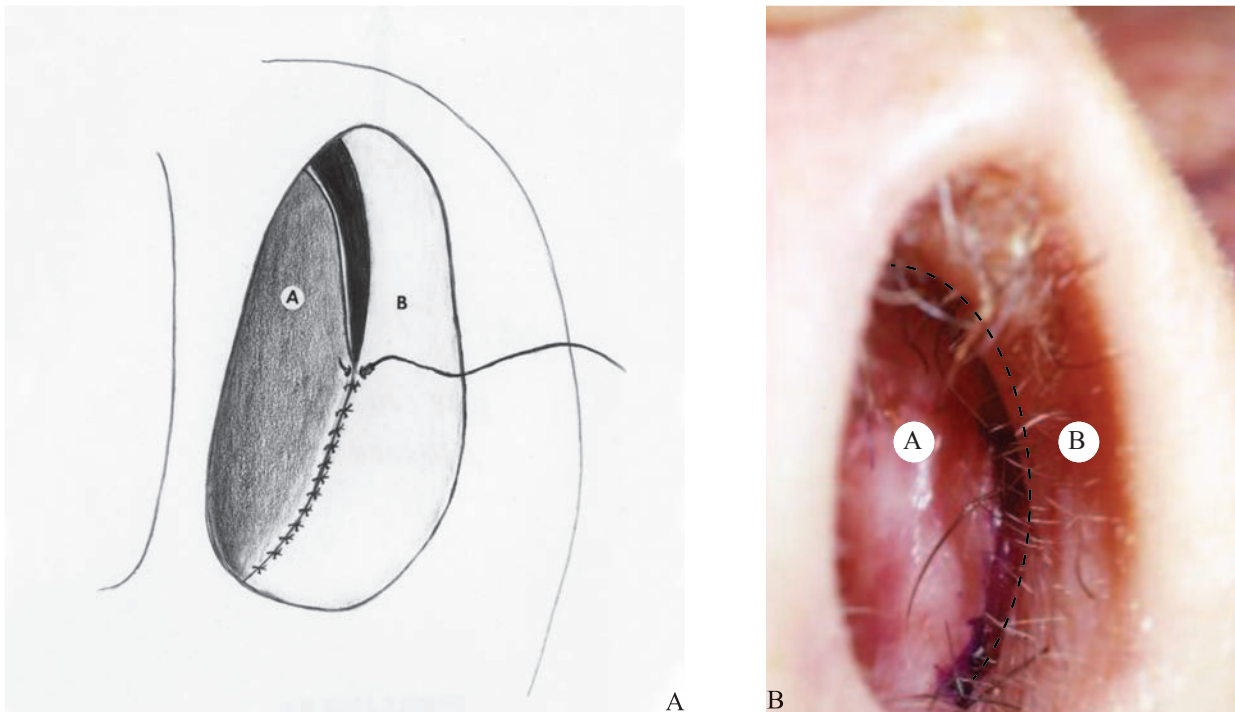


Fig. 7-A. 5-0 chromic suturing technique, reapproximating the anterior edge of the bipedicle flap (A) to the vestibular skin (B). The width of (A) is approximately 4mm. B. Photo of repair, 7 days postoperative. Dotted line indicates area of suture line.



Fig. 8-A Front view (3 days postoperative). B. Lateral view (3 days postoperative).

as described by Schram and Meyers,⁶ is performed. Note that the bipedicle flap is completed only on the side of excision and is not necessary contralaterally. Routine hemostasis is assured. The facial structures are then brought back to their proper position and secured. The important and delicate resuturing of the bipedicle flap to the degloved aspect of the nose is achieved with 5-0 running chromic suture (Fig. 7). The transfixion incision is repaired with two 4-0 chromic transfixion sutures, and the gingival buccal incisions are repaired with a running 4-0 chromic stitch. Light anteriornasal vestibular packing aids in hemostasis and contouring. Postoperative recovery is brisk and uncomplicated (Fig. 8).

COMPLICATION

No major complication has been accounted for in a patient operated upon in this fashion with follow-up extending to longer than 10 years. Bleeding encountered with this approach is brisk, but no more so than with a lateral rhinotomy. The complication of vestibular stenosis has occurred in 2 patients out of a series of 46, and both were reported before modifying the degloving technique with the anterior mucosal bipedicle flap. There have been no stenoses since this information has been in use.

COMMENT

It is anticipated that this procedure will gain wide acceptance for optimal control of inverted papilloma. The authors wish to personally condemn intranasal partial excision of inverted papilloma and view the disease as insidious and aggressive, necessitating total removal. It is important to realize that the degloving

approach is by no means limited. On the contrary, it allows wider exposure than the classically described lateral rhinotomy, thus allowing the surgeon to intraoperatively extend and modify his plan to completely excise the inverted papilloma as the extent of the disease dictates it is to be stressed that this is an excellently tolerated, relatively fast, and easily mastered procedure, which finds wide utility in the management of inverted papillomas as well as successful control of a variety of tumors in the nasal cavity, nasopharynx, and paranasal sinuses.

We wish to emphasize that there is no carte blanche endorsement for this technique as an exclusive operation for inverted papilloma. The technique does not supersede the standard lateral rhinotomy approach. There is, however, interest in pursuing and studying the excellent results which can be obtained with the degloving approach.

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