



Fig. 2. Views of the patient before (left) and after (right) endoscopic forehead lift. About 5 cm of advancement of the forehead flap was gained after the forehead lift procedure.

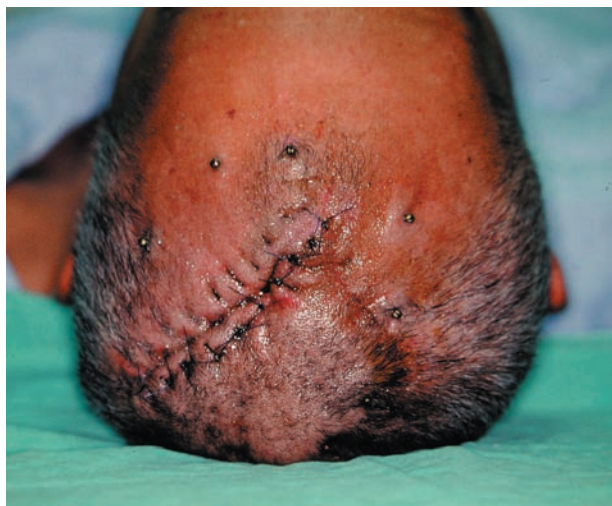


Fig. 3. Two-week postoperative view. The percutaneous external fixation using miniscrews holds the scalp well. The wound healed uneventfully.

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Open Rhinoplasty Technique for Columella Defect

Sir:

We describe a method to resurface a columellar defect using a skin advancement flap from the dorsum and tip of the nose.

A 77-year-old man was admitted for a basal cell carcinoma in the columellar region clinically affixed to the cartilage. Surgery was performed under local anesthesia using lidocaine with adrenaline 1:100,000. The tumor was resected with a 3-mm margin, including a small strip of the underlying alar cartilages. A skin flap was planned from the dorsum and nasal tip, with excision of two Burow triangles lateral to the nasal dome (Fig. 1). Dissection was carried up to the nasal bones to allow advancement of the flap. The flap was moved to cover the defect down to the base of the columella, similar to an open rhinoplasty procedure (Fig. 2). Monocryl 5-0 and Ethilon 6-0 sutures were used for inseting. Histologic analysis confirmed the clinical diagnosis of basal cell carcinoma; the carcinoma was completely excised. In the early postoperative period, the tip appeared somehow flattened, but projection was satisfactory at the 9-month follow-up visit (Fig. 3).

The columella can be considered an independent subunit of the tip of the nose. Various flaps have been described for reconstruction of the columella, such as the alar rim flap,¹ the bifid nasolabial flap,² bilateral cheek and perialar advancement flaps,³ and the axial nasodorsum island flap.⁴ More recently, a microsurgical, retroauricular, prefabricated chondrofasciocutaneous flap has been described.⁵ This flap provided good cosmetic results but left residual scars at the donor site.



Fig. 1. Flap design with two Burow triangles located lateral to the nasal dome.



Fig. 2. The flap is advanced downward to close the residual defect.

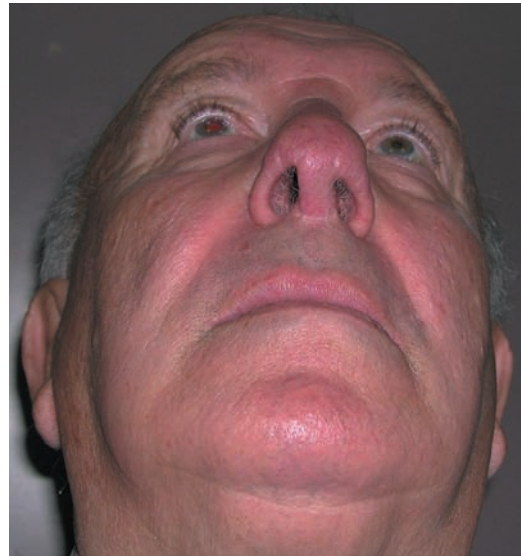


Fig. 3. (Above) Good quality scarring on frontal view at 9-month follow-up. (Below) Good tip projection on lateral view at 9-month follow-up.

Our method for columellar resurfacing uses skin from the dorsum and tip of the nose. The Burow triangles are carefully planned to hide donor-site scars behind the alar rim line. The length of the flap should be planned according to the size of the defect. Tip projection is not a problem if dome cartilage is preserved.

In conclusion, our flap has a reliable vascular supply, appropriate color and texture match, and scars that are not visible, as with those in open tip rhinoplasty; moreover, it is a one-stage procedure and very easy to perform.

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Bilateral Free DIEP Breast Reconstruction Using Contralateral Internal Mammary and Ipsilateral Thoracodorsal Vessels

Sir:

Free flap surgery requires adequate recipient vessels for anastomosis, and these are generally limited to the internal thoracic and thoracodorsal vessels in breast reconstruction. Surgical scarring and radiotherapy can render the thoracodorsal vessels unusable for reconstruction.¹ In such circumstances, some surgeons advocate the use of the internal mammary vessels, as they are not in the radiotherapy or the mastectomy surgical field.^{2,3} In rare cases, these vessels may also be unusable for anastomosis.

A 63-year-old woman was referred to our unit for consideration of bilateral breast reconstruction. She had undergone right-sided mastectomy, axillary clearance, and postoperative chemotherapy and radiotherapy for carcinoma of the breast 17 years earlier. Initial reconstruction was with a subpectoral tissue expander, but the patient developed capsular contracture 3 years later that required revision. Free transverse rectus abdominis musculocutaneous (TRAM) reconstruction was planned, but at the time of the operation both the internal mammary and the thoracodorsal vessels were unsuitable; a pedicled latissimus dorsi flap with a silicone implant was used instead.

At age 63, ductal carcinoma in situ was detected in the contralateral breast and the patient underwent a mastectomy. At this point, she was referred to our unit for reconstruction on the left side and revision of the right side (Fig. 1).

At operation, bilateral deep inferior epigastric perforator (DIEP) flaps were raised, each based on two perforating vessels. For the right-sided reconstruction, the inferior epigastric vessels were anastomosed to the internal mammary vessels on the left. The flap on the left side was anastomosed to the thoracodorsal vessels on the left.

At outpatient review, both flaps were viable, although the position of the left breast was felt to be too lateral and a medialization procedure was planned.

Radiotherapy following mastectomy is associated with volume loss, fat necrosis, and deformity of free flap reconstructions.⁴ For these reasons, delayed reconstruction has gained favor recently. The detrimental effects on the microvascular system that result from radiotherapy are well documented,¹ and these effects, in addition to surgical scarring, can make the recipient vessels unsuitable for free flap anastomosis. Some studies suggest unusability rates of up to 20 percent for the



Fig. 1. Postoperative views after deep inferior epigastric perforator reconstruction.

internal mammary vessels and 26 percent for the thoracodorsal vessels following radiotherapy.⁵ In these circumstances, many surgeons advocate conversion to a pedicled flap reconstruction.

TRAM and DIEP flaps can be raised with a long pedicle, and we found this to be adequate to reach the contralateral internal mammary vessels in this case. The contralateral side was unaffected by radiotherapy or surgery in the axilla, so the thoracodorsal vessels were suitable for use in the ipsilateral reconstruction. The main disadvantage of this technique is that the flap anastomosed to the thoracodorsal vessels may lie too laterally if the pedicle is short.

This case illustrates that the contralateral internal mammary vessels may be used for free flap reconstruction in cases where otherwise a pedicled reconstruction may be the only option. This need not compromise future reconstructive options on the contralateral side if the thoracodorsal vessels are intact.

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