

RECONSTRUCTING THE NASAL TIP WITH A MIDLINE FOREHEAD FLAP

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The nasal tip is the central focus point of the face and even small defects constitute a major deformity. Many methods of reconstruction are described in most textbooks of plastic surgery and are related to the size, shape and site of the defect. I have found a midline forehead flap to be most useful in many such defects. Although narrow, it will support a "wing" on either or both sides which may be used to reconstruct associated defects of the alae or columella. It also provides skin of the correct colour and texture.

The technique is illustrated in Figure 1. The vertical part of the midline flap is 2 cm wide and the wing(s) sufficiently broad to be folded and create an alar margin. The secondary defect is closed directly. The stiffness of the tissues allows a very adequate projection of the new nasal tip, which is hard to obtain by other methods; in effect the projection is the result of a deliberate fashioning of a "dog-ear". The flap may look pale in the early postoperative period, but remains viable and may be divided at 2 weeks and the unwanted portion discarded. No attempt is made at this stage to tailor the upper margin of the reconstructed tip, which is approximated to the nasal skin proper without undermining. The flap becomes temporarily oedematous and it is necessary to delay

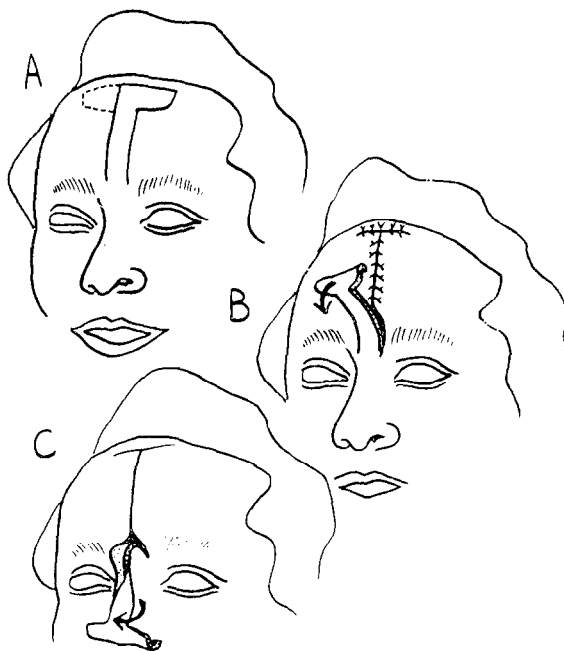


FIG. 1. The midline flap is 2 cm broad and may be used alone or with 1 or 2 wings at its upper end.



FIG. 2. A and B. Case 1. Defect the result of a human bite prior to midline forehead flap reconstruction.



FIG. 3. A and B. Case 1. Result prior to final trimming.

final trimming of the upper margin for some weeks until this subsides. A further trimming operation may be needed later to complete the levelling of the junction between the reconstructed tip and the normal nasal skin. Although time is necessary to achieve an optimal result, the outcome is usually satisfactory.

ILLUSTRATIVE CASES

Case 1. Midline flap alone. The defect shown in Figure 2 resulted from a human bite 3 years previously. The man was now 27 and wished the tip reconstructed. A midline forehead flap without wings was used to augment the tip and upper half of

the columella after turning down 2 small flaps for lining. Figure 3 shows the result immediately prior to thinning of the flap. He did not attend for final review.

Case 2. Midline flap and 1 wing. A 24-year-old man sustained a human bite which removed the tip of his nose (Fig. 4). The same evening the defect was repaired by a forehead flap with a single wing to replace the missing ala. The pedicle was severed 2 weeks later and the upper margin of the flap left to heal (Fig. 5). The repair was completed 6 months later by trimming the upper edge of the flap and inserting a small composite graft from the helix into a shallow residual notch in the right alar margin. (Fig. 6.)



FIG. 4. Case 2. Human bite repaired on the day of injury with a midline forehead flap and 1 wing.
FIG. 5. Case 2. Immediate result after healing.

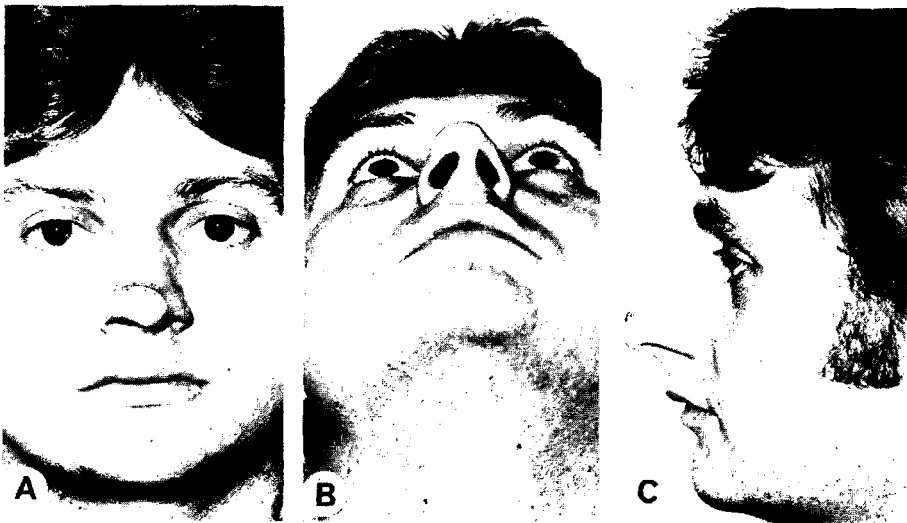


FIG. 6. A, B and C. Case 2. The healed result after final trimming.

Case 3. Midline flap with 2 wings. This 15-year-old lad had sustained a deep burn of his face in infancy. His appearance at age 8 is shown in Figure 7 when he had had some full thickness grafts applied. He was now much more concerned with the residual deformity and a midline flap with 2 wings was used to provide more tissue to the tip and alae (Fig. 8). At first the tissue was rather excessive and oedematous (Fig. 9) and was later trimmed (Fig. 10). He awaits a final thinning.



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FIG. 7. Case 3. Nasal tip defect following facial burn in infancy. Child aged 8.

FIG. 8. Case 3. Now aged 15 years, the defect was built up with a midline flap with 2 wings.

FIG. 9. Case 3. Excess tissue and some oedema before trimming.

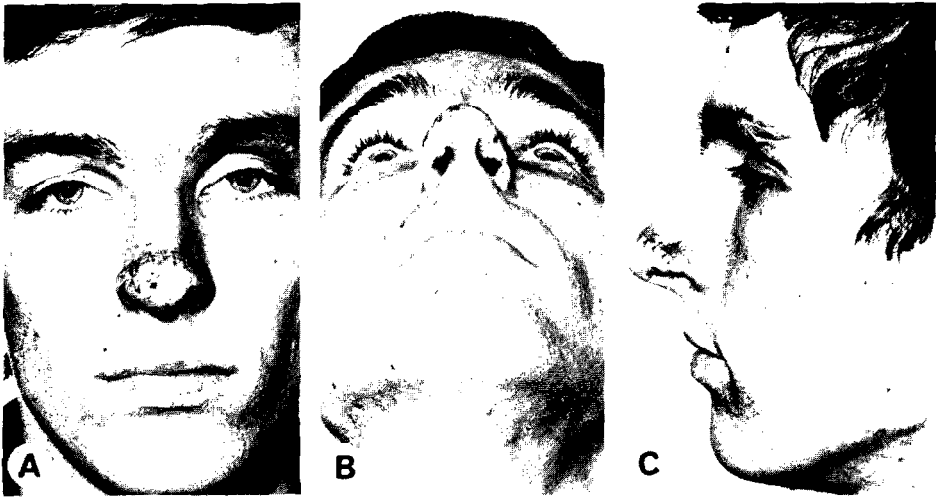


FIG. 10. A, B and C. Case 3. After trimming.

CONCLUSIONS

For smaller defects of the nasal tip and adjoining tissues, this has proved a useful and versatile flap.

I wish to thank Mr T. L. Barclay for drawing my attention to this type of repair and for allowing illustrations of some of his patients. I wish also to thank the photographic department at St Luke's Hospital and Miss E. Drury for secretarial help.