BRITISH JOURNAL OF



POINT OF TECHNIQUE

An aid to accurate planning of alar reconstruction in rhinoplasty

G. L. Ross and N. S. Mercer

Department of Plastic Surgery, Frenchay Hospital, Bristol, UK

SUMMARY. Accurate placement of intranasal incisions to achieve external alar symmetry is difficult. A detailed anatomical knowledge of intranasal anatomy is required to allow an appropriate incision to be made within the nasal vestibule. By marking the level of the intracartilaginous incision on the external surface using a pair of alice forceps, the marking is subsequently transferred onto the vestibular nasal surface. The initial incision can therefore be made on the vestibular nasal surface along the marking made by the alice forceps. © 2001 The British Association of Plastic Surgeons

Keywords: rhinoplasty, alar reconstruction, alar symmetry, intranasal incision.

Method

We use a pair of alice forceps to mark the initial incisions for alar reconstruction. The nose is prepared and the lower lateral cartilage margin palpated externally. The alice forceps are placed on the lower margin externally, with one side of the alice forceps externally and the other within the nasal vestibule (Fig. 1). As the alice forceps are closed a marking is made on the external surface (Fig. 2). This is continued along the intended resection margin until the lower lateral resection margin is defined externally (Fig. 3). The vestibular nasal surface now shows a distinct marking (Fig. 4), which can be used as the initial



Figure 1—Alice forceps are placed on the lower lateral cartilage externally.

incision for the subsequent rhinoplasty and the lower lateral cartilage resection performed through the exposure obtained by using these incisions.

Discussion

Tip-rhinoplasty results depend on good surgical technique and a detailed understanding of the nasal anatomy.¹ All three vaults of the nose can be assessed externally and its internal structure can be inferred from visible landmarks. The lower lateral cartilages can be evaluated by delivering them through the vestibule, and different



Figure 2—Marking left behind on the external surface of the lower lateral cartilage on the right side.



Figure 3—Completed markings on the external surface of the lower lateral cartilage.

surgical treatments of the lower lateral cartilage can create a variety of aesthetic results.^{1,2}

The initial incision is important in providing suitable access.^{1–5} Marking techniques are a valuable tool in both denoting the appropriate surgical incision and as a teaching tool for the inexperienced surgeon.² By marking the intended cephalad lower lateral cartilage resection on the external surface with alice forceps, the incision marking on the vestibular surface is clearly visible. Previously, the transfer of the external nose markings to the vestibular surface was made and improved through experience and subsequent understanding of the nasal anatomy. The only other marking technique described involves using a needle and blue dye as in otoplastic surgery.²

The alice forceps are available in all rhinoplastic surgical-instrument sets. They are simple to use and cause no permanent marking of the surface of the nose. We recommend their use in marking all tip-rhinoplasty operations.

References

 Sheen JH. Closed versus open rhinoplasty – and the debate goes on. Plast Reconstr Surg 1997; 99: 859–62.



Figure 4—Completed marking on the vestibular nasal surface.

- Moss RA. An accurate tip rhinoplasty marking technique. Ann Plast Surg 1990; 24: 538–9.
- Spiro SA, Wolfe SA, Wider TM. The use of the labiocolumellar crease incision in rhinoplasty. Ann Plast Surg 1996; 37: 569–76.
- Holmström H, Luzi F. Open rhinoplasty without transcolumellar incision. Plast Reconstr Surg 1996; 97: 321–6.
- Guerrerosantos J. Open rhinoplasty without skin-columella incision. Plast Reconstr Surg 1990; 85: 955–60.

The Authors

G. L. Ross MRCS, Senior House Officer

N. S. Mercer FRCS, FRCPCH, Consultant Plastic Surgeon

Department of Plastic Surgery, Frenchay Hospital, Frenchay Park Road, Frenchay, Bristol BS16 1LE, UK.

Correspondence to Mr Gary Ross, 5 Belmont Drive, Belfast BT4 2BL, UK.

Paper received 26 May 2000. Accepted 10 October 2000. Published online 4 January 2001.