

Technical Note  
Cosmetic Surgery

# The importance of shaving the zygomatic process during reduction malarplasty

**T. S. Lee**

Centre for Maxillofacial Surgery, ID Hospital,  
Seoul, Republic of Korea

*T.S. Lee: The importance of shaving the zygomatic process during reduction malarplasty. Int. J. Oral Maxillofac. Surg. 2016; 45: 1002–1005. © 2016 International Association of Oral and Maxillofacial Surgeons. Published by Elsevier Ltd. All rights reserved.*

**Abstract.** Reduction malarplasty surgery has become increasingly popular in recent years, especially in many East Asian countries. This is, in part, because many Asians consider a small, smooth, and feminine face to be more attractive and aesthetically desirable. Among the various reduction malarplasty methods, the L-shaped osteotomy technique, through intraoral and sideburn incisions, is now one of the most frequently performed surgical techniques. During the surgical procedure, it is important to shave the zygomatic process of the temporal bone through the sideburn incision. By carrying out this simple adjunctive procedure, several remarkable results can be achieved. The facial width is reduced, especially in those patients with protrusion of the posterior portion of the arch. The outward curvature of the zygomatic arch is changed to point inward. And finally, the bony step that originates from the medial repositioning of the zygomatic arch is reduced, resulting in decreased palpability.

Key words: reduction malarplasty; facial bone contouring; zygoma reduction.

Accepted for publication 5 January 2016  
Available online 22 January 2016

The zygomatic bone plays an important role in determining the width of the middle face. Furthermore, the shape and projection of the zygoma influences one's facial impression. Asian and Western populations exhibit many aesthetic differences of the zygoma. In a typical Asian face, the zygomatic body and arch are overly prominent and result in a rather rough and masculine facial appearance and imbalance.<sup>1–3</sup> For this reason, reduction malarplasty has recently increased in popularity in many East Asian countries, as individuals seek to obtain a smoother and more feminine facial contour.

Ever since Onizuka et al. first introduced the idea of shaving the zygomatic bone through the intraoral incisions in the early 1980s,<sup>4</sup> various methods of reduction malarplasty have been developed.<sup>1,3,5,6</sup> Recently, the L-shaped osteotomy technique has been performed more frequently because of its effectiveness and stability in reducing the zygomatic bone.<sup>2,7–10</sup> When performing the usual L-shaped osteotomy method, a dual approach including intraoral incisions and sideburn (or pre-auricular) incisions is made. The intraoral approach is done to reduce the zygomatic body with the

L-shaped osteotomy technique, while the pre-auricular approach is done to cut the zygomatic arch and reposition it inwardly. This article describes the importance of shaving the zygomatic process of the temporal bone during the pre-auricular approach before medially repositioning the zygomatic arch.

## Surgical technique

All operations are performed under general anaesthesia with orotracheal intubation. First, through an intraoral approach, an L-shaped osteotomy is made with a certain



Fig. 1. Preoperative and postoperative zygomatic arch view radiographs.

amount of bone resection in the zygomatic body, according to the preoperative surgical plan. Next, the zygomatic arch is cut through an incision in the sideburn region using a reciprocating saw. The zygomatic process of the temporal bone – the segment of the zygomatic arch that is posterior to the osteotomy site – is then shaved using a surgical bur. After shaving of the zygomatic process is complete, the arch segment anterior to the osteotomy is pushed inwardly and fixed rigidly. Finally, through the previously approached intraoral incision, the osteotomized zygomatic body is repositioned medially and fixed rigidly using titanium plates (Fig. 1).

### Discussion

When a reduction malarplasty is carried out to reduce the width and prominence of the zygoma, the importance of shaving the zygomatic process of the temporal bone can easily be ignored. The bone shaving procedure itself is an extremely simple adjunctive procedure. It can be carried out in a rather simple and easy manner by burring the zygomatic process through the same sideburn (or pre-auricular) incision made for the medial repositioning of the zygomatic arch. This procedure can markedly improve postoperative aesthetics and patient satisfaction, as outlined below.

### Reduction of facial width

In patients who have a broad and outwardly protruding zygomatic arch, especially in the posterior portion of the arch, the facial width will not be changed if the zygomatic process is left unshaven during the reduction malarplasty procedures. By shaving the posterior part of the zygomatic arch, i.e. the zygomatic process of the temporal bone, the widest point that determines the facial width will be displaced medially (Fig. 2). The width at the level of the zygomatic arch can be measured pre- and postoperatively on a transverse section of a computed

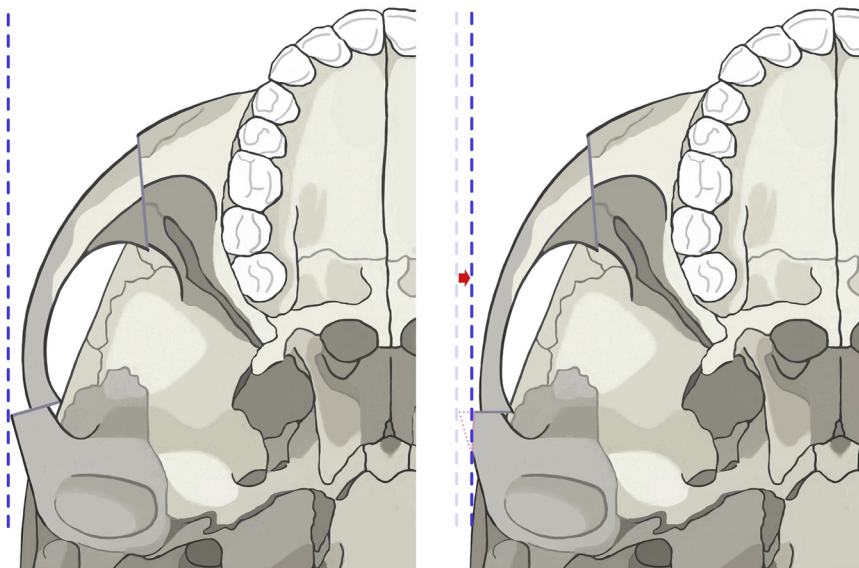


Fig. 2. In patients with a protruding zygomatic arch, shaving the zygomatic process of the temporal bone medially replaces the widest point that determines facial width. Consequently, facial width is reduced.

Download English Version:

<https://daneshyari.com/en/article/3131820>

Download Persian Version:

<https://daneshyari.com/article/3131820>

[Daneshyari.com](https://daneshyari.com)