Alternative to tarsorrhaphy in peripheral facial nerve palsy with expectation of functional recovery

Technical note

EDUARDO FERNANDEZ, M.D., ROBERTO PALLINI, M.D., AND GIULIO MAIRA, M.D.

Institute of Neurosurgery, Catholic University, Rome, Italy

A simple technique is described for protecting the cornea in patients with peripheral facial nerve palsy while waiting for recovery of nerve function. The application of an adhesive strip to the superior eyelid permits opening and closing of the eye, and provides good protection of the cornea.

KEY WORDS • facial nerve palsy • eye closure

TARSORRHAPHY is frequently performed in patients with peripheral facial nerve palsy to prevent corneal lesions. Generally, this procedure is temporary; it is maintained until the facial nerve function recovers spontaneously or until after a reconstructive operation. We propose a simple alternative method to protect the eye in patients with peripheral facial nerve palsy with expectations of recovery (Fig. 1).

FIG. 1. A patient with complete peripheral facial nerve palsy secondary to total excision of a giant acoustic neurinoma. Two days after these photographs were taken, a hypoglossofacial anastomosis was performed. Upper Left: Orbicularis oculi muscle palsy. Upper Right: The same patient after application of an adhesive strip. Lower Left: Reduction of the interpalpebral space. Lower Right: Closing of the eye is possible.
Technique

This method consists of applying an adhesive strip (45 x 4 mm) on the carefully cleaned skin of the superior eyelid and of the adjacent zygomatic region (Fig. 1). The strip is placed so as to lower the superior eyelid. The reduction of the interpalpebral space thus obtained does not affect vision, and voluntary opening of the eye is not prevented. In addition, it becomes possible to close the eye.

The adhesive strips are obtained from a protective sheet* that we use in immobile patients to prevent decubitus ulcers. It is well tolerated by the facial skin.

*Comfeel manufactured by Coloplast A/S, DK-3060-Espergaerde, Denmark.

This simple method is recommended in patients with peripheral facial nerve palsy in whom recovery of function is expected. The strip can be changed every day. The patient himself, his family, or nurses can easily apply it. According to our experience, this method permits better preservation of the visual function compared with tarsorrhaphy; protection of the cornea is equally good.

Manuscript received December 20, 1983.
Address reprint requests to: Eduardo Fernandez, M.D., Institute of Neurosurgery, Catholic University, Largo A. Gemelli 8, 00168 Rome, Italy.