

Our Concept for Reconstruction of a Full-Thickness and Total-Width Defect of the Upper or Lower Eyelid

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INTRODUCTION: As the elderly population continues to expand, the number of patients with skin cancer is increasing. Several types of carcinoma can occur in the eyelid. Because the range of the eyelid is narrow, the defect after malignant tumor resection is likely to be full-thickness and total-width defect. Several procedures have been reported for those large defects and they vary according to the facility. We describe here our method for reconstruction of a full-thickness and total-width eyelid defect.

METHODS AND RESULTS: Our treatment policy for a full-thickness and total-width eyelid defect is the use of an appropriate reconstruction material that matches the structure of the eyelid. A three-layered structure consisting of a skin flap, cartilage and mucosa, which correspond to the skin and subcutaneous tissue, tarsus and conjunctiva of the eyelid, respectively, is used for reconstruction. For the lower eyelid, if dermatochalasis of the upper eyelid is severe and there is excessive skin, an orbicularis oculi musculocutaneous flap is preferred for reconstruction of the anterior lamella. If the surrounding skin is not sufficient, a reverse superficial temporal artery (STA) flap is used¹. The posterior lamella is reconstructed with a conchal cartilage graft and oral mucosa graft. However, for the upper eyelid, we use a lid switch flap as the primary method², which is the best method both functionally and aesthetically. The lower eyelid donor site is reconstructed as described. Reconstruction using our method was carried out in seven patients. No major complications were seen during the follow-up period.

CONCLUSION: A sufficient amount of soft tissues is an essential condition for either upper or lower eyelid reconstruction. If the eyelid is reconstructed with an insufficient amount of soft tissues, complications such as ectropion or drooping are likely to occur because of irresistible contracture, and such complications would cause pain for the patient. We have been performing eyelid reconstruction using a three-layered structure with an adequate amount of tissues, and our method provides functionally and aesthetically excellent results.

REFERENCES:

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