CORNEAL EPITHELIAL REJECTION AFTER ALLOGRAFT CONJUNCTIVAL TRANSPLANTATION FOR LIMBAL PAPILLOMA

A Case Report

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ABSTRACT

The authors report a case of typical corneal epithelial rejection two months after allogenic limbal-conjunctival graft for a recurrent limbal-conjunctival papilloma in a 62-year-old female patient. The HLA donor-recipient pair was haploidentical (50% identity). This observation suggests a clear conjunctival epithelial transdifferentiation onto corneal epithelium. This is the first report, to the best of the authors’ knowledge, of allograft conjunctival transplantation for this disease and of corneal epithelial rejection after such a procedure. In this case, there was no rejection of the conjunctival graft, and corneal rejection was successfully treated with oral prednisone and topical 1% prednisolone.

INTRODUCTION

Extensive experimental and clinical work has demonstrated the importance of limbal basal epithelial cells, the “stem cells,” for the so-called “transdifferentiation,” i.e., transformation of conjunctival epithelial cells into cells biochemically and morphologically similar to the corneal epithelium. This occurs when the entire corneal epithelium is removed, and the limbal area is intact, or when a new limbal conjunctival tissues is transplanted to an affected area after removal of the entire corneal epithelia.1-8
Conjunctival transplantation is one of the several approaches for limbal tumor as an obstacle for its recurrence after tumor removal. This paper reports a case of corneal epithelial rejection after an allograft conjunctival transplantation for a recurrent limbal papilloma.

CASE REPORT

A 65-year-old woman was sent to the Cornea Service in December, 1994 because of a recurrent limbal papilloma after simple surgical removal.

Slit lamp examination disclosed a 360° mass that clinically appeared to be a recurrent papilloma (Fig. 1). The tumor covered part of the para-central cornea, distorting central corneal curvature, leading to a decreased visual acuity (count fingers at 3 meters).

Removal of the entire mass, with a superficial keratectomy and an allograft conjunctival transplantation, was performed in April, 1995 under subconjunctival anesthesia.

Allograft conjunctival transplantation was preferred to autograft because the fellow eye presented corneal and conjunctival abnormalities secondary to staphylococcal ble-