Introduction

A pterygium is afibrovascular wing shaped tissue that develops from the conjunctiva and grows onto the cornea in the interpalpepral zone more common on the nasal side. It is thought to result primarily from ultraviolet light-induced damage to connective tissue underlying the conjunctiva (**Mackenzie et al., 1992).**

It is a worldwide cause of cosmetic complaints, chronic irritative symptoms and decreased vision secondary to growth over the pupillary axis or disruption of the refractive surface of the corneal tear film with resultant astigmatism **(Chen et al., 1995).**

The most effective therapy for pterygia is surgery. Although many surgical techniques and adjunctive therapies have been proposed, recurrence is a frequent complication **(Murat et al., 1994).**

Several surgical approaches have been attempted. All procedures can be reclassified according to the method of dealing with the defect created. Even with " simple excision", there has been considerable variability in the extent, in terms of depth and size of subconjunctival tissue removal. After excision, the resulting defect can either be left exposed, "bare sclera excision″ **(Coroneo, 1992), or** covered by surrounding conjunctiva as " primary closure" (**Anduze, 1989 &Riodan et al., 1993)**, or a pedicle flap **(McCoombs et al., 1994)**, or by transposition of the pterygium head **(Said et al., 1975)**. Without covering the defect.

Adjunctive therapy such as beta radiation **(Monselise et al., 1984&Mackenzie et al., 1991),** thio-tepa **(Adamis et al., 1990)**, or mitomycin C **(Hayasaka et al., 1988)**, frequently is required to reduce the recurrence rate however these adjunctive treatments are associated with complications including superficial punctate keratitis **(Rachmiel et al., 1995)**, poor epithelial healing, late-onset scleral ulceration, microbial infeciton, glaucoma and endophth-almitis **(Tarr&Constable, 1980)**.

The normal cornea is surfaced with non-keratinized, stratified squamous epithelium, which contains no goblet cells, optically regular, and has a substantial capacity for selfrenewal. Corneal epithelial repair generated through the division of specialized stem cells located in the basal epithelial layer of the peripheral cornea and corneoscleral limbus. Regeneration occurs by centripetal migration of differentiated cells (derived from stem cells) from the periphery to the central cornea **(Williams et al., 1995)**.

As a result of studies on stem cells, conjunctival autograft with limbic epithelium have been suggested in management of pterygium **(Chen et al., 1995).**

Shimazaki et al. (1996) successfully used limbal autograft transplantation in the treatment of patients with pterygium who have a high risk of recurrence due to the ability of the limbal graft to probably act as a barrier to regrowth of subconjunnctival tissue and supply stem cells to the corneal epithelium and establishment of a healthy ocular surface.