“AN OBSERVATIONAL STUDY TO COMPARE THE OUTCOME OF CONJUNCTIVAL AUTOGRRAFT AFTER EXTENDED EXCISION OF PTERYGIUM ALONG WITH AND WITHOUT CYCLOSPORINE FOR PRIMARY FLESHY PTERYGIUM”

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ABSTRACT

INTRODUCTION:

Pterygium is a degenerative disease of the conjunctiva, characterized by cellular proliferation, tissue remodeling and inflammation. It is a common ocular surface disease which encroaches over the cornea obscuring visual axis, impairing vision and also causing ocular discomfort. Many surgical and medical methods are available for pterygium removal, but recurrence still continues to be a big problem. The conventional conjunctival autograft done for pterygium removal is considered to be efficient with less recurrence rate. A modification of it, the extended conjunctival autograft following extended pterygium removal, which
removes all the pterygium tissue from the eye with improved cosmesis and least recurrence rate is efficient in pterygium surgery. Here the recurrence rate is reduced by extensive excision of the Tenon’s fascia around the pterygium tissue, along with extensive excision of the pterygium. The improved cosmesis is due to a nasal suture mimicking a semilunar fold and the decreased scarring at the incision site with the use of intense postoperative topical steroids.

On using 0.05% topical cyclosporine(CsA) postoperatively, decreases the recurrence rate to the least. Cyclosporine being a T cell inhibitor, which inhibits all the inflammatory mediators like cytokines, interleukins, TNF alpha which was proposed to play a role in aetiopathogenesis of pterygium formation. It also blocks the angiogenic factor induced by VEGF and also inhibits fibroblast proliferation. Thus cyclosporine plays a potential role in prevention of pterygium recurrence.

AIMS & OBJECTIVES:

To study the efficacy of conjunctival autograft after extended pterygium excision in primary fleshy pterygium and to determine the recurrence rate after surgery with and without cyclosporine.

METHODOLOGY: Prospective, observational, case-control study.

This study was conducted in patients with primary fleshy pterygium, who satisfy the inclusion criteria attending the OPD as well as in the wards at Govt Rajaji Hospital Madurai after obtaining consent. 60 patients were selected and divided into two groups. 30 patients were included in Group I in whom surgery (extended pterygium removal followed by extended conjunctival autograft) with post operative 0.05%topical cyclosporine was given 6 hourly for 6 months and 30 patients in Group II had surgery done with postoperative placebo drops (lubricants)

RESULTS AND DISCUSSION: There was no statistically significant differences based on age, sex, preoperative visual acuity, astigmatism among the two groups. On analysis of results Group II patients on placebo, had 20% recurrence compared to group I patients on cyclosporine with 0% recurrence rate which was statistically significant with p value of 0.024. There was an improvement in baseline visual acuity and a decrease in astigmatism postoperatively in both the groups. The
postoperative complications and side effects were almost equal in both groups which was not statistically significant suggesting that 0.05% topical cyclosporine is a safe and effective drug for postoperative use.

CONCLUSION:
The study to compare the efficacy of extended conjunctival autograft followed by extended pterygium removal with postoperative 0.05% topical cyclosporine shows significant results in visual acuity improvement, with least complications and low recurrence. Hence it is an effective method for pterygium removal with least complications and recurrence.