

## SUMMARY

Pterygium is a minor ocular disease but it is a major surgical challenge because of the frequent and aggressive recurrence and because the optimal surgical treatment of this common lesion remains controversial.

Numerous surgical techniques have been proposed for pterygium removal but none was universally accepted because of the high recurrence rate. The reported frequency of recurrence for primary pterygium varies widely for different procedures, ranging from 24-67 % of cases after excision by the bare sclera technique.

Recurrences may grow aggressively, rapidly reaching and even overtaking the size of the original pterygium. Treatment with the use of radiation therapy ,or antimetabolites have succeeded in diminishing the rate of recurrences to 5-12%.

But serious complications are associated with these methods of treatment, such as severe secondary glaucoma, cataract, uveitis, corneal perforation, and scleral necrosis, resulting in perforation and secondary endophthalmitis.

Recently, as a result of studies on stem cells that lie at the basal layer of limbic epithelium and the role that a healthy limbus plays as a barrier to conjunctival overgrowth, conjunctival autografts with limbic epithelium have been suggested in management of pterygium.

The aim of this work is to study the effectiveness of limbal-conjunctival autograft transplantation in the management of cases with

recurrent pterygium. The study was conducted on 20 patients with 20 pterygia.

The patients were followed-up for good graft plantation, reepithelialization of donor sites, presence or absence of scar formation and recurrence. Results were recorded, tabulated, statistically analyzed and discussed.

Postoperative symptomatic complaints of ocular pain, photophobia, lacrimation and foreign body sensation or any of them were occurred to varying degrees of severity by all patients during the first postoperative month.

Postoperative graft injection was gradually decreased to disappear by the end of the first postoperative month.

Conjunctival injection was mainly occurred around the graft, which vascularized within 3-5 days postoperatively. The conned epithelial defect was completely re- eithelialized by the end of the first postoperative week the donor sites from which the grafts were taken were completely re- epithelialized after 2 weeks.

The best corrected visual acuity showed improvement in 14 patients 70% while remained stationary in the other 6 patients 10%. The visual acuity an improvement of one line in 12 patients 60% and of two lines in 2 patients 10% recurrence were observed in 2 cases 10% one male & the other was female their age below 45 year. The recurrence occurred after 2 months of operation.

From the previous results, it is concluded that LCAT is the treatment of choice in recurrent pterygia due to its efficacy and lack of serious complications. It achieves accurate anatomical reconstruction of the ocular surface and restores the limbal barrier. It also gives an excellent cosmetic result that was seeking by the patient.