SUMMARY & CONCLUSIONS
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This work is an experimental study where conjunctival limbal autograft transplantation was performed in cases with primary and recurrent pterygia to observe their effectiveness in preventing recurrence, to elucidate any intra or postoperative complications encountered and to evaluate the effect of the surgery on visual acuity.

A total 48 eyes of 48 patients underwent surgery over a period of 12 months. 83.3% of the cases had primary pterygia. There was a male preponderance in the cases (62.5%).

Recurrence occurred in 3 eyes (6.3%) within 6 months after surgery. Recurrence rate in primary cases was 5% (2 in 40 cases) while that in recurrent cases was 12.5% (1 in 8 cases). Greater inflammation preoperatively, as seen according to morphological grading of pterygium, led to higher recurrence rates and the two factors appeared to be linked. Also, younger age and male gender was associated with a higher propensity of recurrence.

Although it is not uncommon to encounter minor problems such as conjunctival graft edema, corneoscleral dellen, epithelial cysts, the overall success of the procedure, lack of significant complications and independence from adjunctive pharmacologic or radiation therapies is especially encouraging. Careful dissection of Tenon’s tissue from the conjunctival graft and recipient bed, minimal manipulation of tissues and accurate orientation of the graft are the key factors for an optimal surgical result.
Visual acuity was unchanged in 77% and improved in 21% of the cases. Pterygia may compromise vision either by direct obscuration of the visual axis or more commonly, through irregular astigmatism—induced either by distortion of the cornea or the axial tear film. Conjunctival grafts heal rapidly and are unlikely to worsen induced astigmatism.

In conclusion, this study demonstrates a low recurrence rate from pterygium excision and conjunctival autografting in a predominantly rural, middle aged Indian population in an area in which pterygia are prevalent and ultraviolet radiation levels are high. This technique is free from sight threatening complications, unlike topical chemotherapy or radiotherapy and has no manifest deleterious effect on visual acuity. No major operative or postoperative complications were encountered. The inclusion of limbal tissue in conjunctival autografts following pterygium excision appears to be essential to ensure low recurrence rates. This technique is safe, simple and inexpensive and is recommended for the management of both primary and recurrent pterygia in Indian eyes.

From the study we arrived at the following conclusions:

- Recurrence occurred only in 6.3% of cases, similar to the low rates reported in other studies.
- There is a male preponderance in the incidence of pterygium in this region resulting from greater exposure to ultraviolet light due to greater outdoor activity.
- Young age and male gender was associated with greater recurrence after pterygium surgery.
- Greater inflammation preoperatively led to higher recurrence rates.
- Complications that occurred were minor and either required no treatment or were managed by simple interventions.
- Visual acuity in most cases was unchanged or improved after surgery.

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