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**COMPARISON OF LIMBAL VS LAMELLAR AUTOGRAFT FOR PTERYGIUM SURGERY.** M. Assouline, C. Favard, J. Moossavi, F. Mayer, E. Frau, Y. Pouliquen

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**Purpose:** To investigate two newly developed surgical techniques for the reconstruction of the limbal area following removal of a pterygium in terms of recurrence rate, and corneal topographical changes.

**Methods:** We prospectively compared 53 consecutive cases of lamellar autokeratoplasty (LAKP) to 46 consecutive cases of limbal autotransplantation (LAT) associated to the transposition of superior bulbar conjunctiva following excision of a pterygium. Clinical outcome variables including best corrected visual acuity, refraction and recurrence of pterygium were analyzed. In addition, changes in the corneal topography were monitored using the TMS1 system (Tomey, France).

**Results:** True recurrence of pterygium was observed in one case of the LAKP, but not in the LAT group. In addition, 5 cases of the LAKP group had marked induced astigmatism (8 to 13 diopters), associated to a progressive ectasia of the donor site. In the LAT group, postoperative astigmatism was not significantly different from preoperative values.

**Conclusion:** LAT may be as effective as LAKP to prevent recurrences of pterygium and may avoid the risk for significant induced astigmatism.

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**EFFECT OF INTRAOPERATIVE MITOMYCIN C IN RECURRENT PTERIGIUM: LONG TERM FOLLOW-UP**MASTROPASQUA L, CARPINETO P, ZUPPARDI E, FALCONIO G, CERULLI AM and GALLENGA PE  
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**Purpose:** The aim of this study was to evaluate the long-term results of intraoperative administration of mitomycin C in the surgical treatment of patients with one recurrence of pterygium.

**Methods:** 45 white patients with one recurrence of pterygium were included in the study. The "bare sclera technique" was performed and a sterile sponge soaked in a 4% mitomycin C solution was placed intraoperatively in the episcleral space for three minutes. A sex and age matched control group was used; the control group underwent only surgical excision. Recurrences were analyzed by the  $\chi^2$  test and the method of Kaplan Meyer (life-table analysis); the difference between survival curves was tested by the log-rank test. The  $\chi^2$  test with Yates' correction or Fishers' exact test were used to analyze the difference in complications and side effects between the two groups.

**Results:** 6 recurrences (12.5%) were observed in the mitomycin C treated patients and 16 (35.6%) in the control patients ( $P=0.027$ ) after a mean postoperative follow-up of  $30.55 \pm 13.70$  months. The 24- and 48-month life-table success rates were 89% and 83% in the mitomycin C treated group and 66% and 63% in the control group, respectively ( $P=0.022$ ). No severe side effects were checked during follow-up. 7 mitomycin C treated eyes (15.5%) manifested a superficial punctate keratitis in the early postoperative period ( $P=0.018$ ).

**Conclusion:** Intraoperative administration of mitomycin C was useful in improving the success rate after recurrent pterygium surgical excision. No severe side effects, described for postoperative instillation of mitomycin C, was found in intraoperative administration.