Recurrence of Pterygium after Surgery and the Effect of Surgical Technique on the Recurrence of Pterygium in Patients with Pterygium

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Abstract: A pterygium is an eye surface lesion that begins in the limbal conjunctiva and progresses to the cornea. The lesion is more common in the nasal limbus than in the temporal, and it has a distinctive wing-like aspect. Indications for surgery, in decreasing order of significance, are grown over the corneal center, decreased vision due to corneal deformation, documented growth, sensations of discomfort, and aesthetic concerns. Recurrent pterygium results in the loss of time, the expense of therapy, and the potential for vision impairment. The objective of this study is to find out how often the recurrence of pterygium after surgery occurs, what effect the surgery technique has, and what causes them to come back in people with pterygium. Materials and Methods: Observational case control in retrospect: the study involves a retrospective analysis of 164 patient samples. Data analysis is descriptive statistics analysis, i.e., basic data details about pterygium surgery and the risk of recurrent pterygium. For factor analysis, the inferential statistics odds ratio (OR) and 95% confidence interval (CI) ANOVA are utilized. A p-value of 0.05 was deemed statistically important. Results: The majority of patients, according to the results, were female (60.4%). Twenty-four of the 164 (14.6%) patients who underwent surgery exhibited recurrent pterygium. The average age is 55.33 years old. Postoperative recurrence was reported in 19 cases (79.3%) of bare sclera techniques and five cases (20.8%) of conjunctival autograft techniques. The recurrence interval is 10.25 months, with the most common (54.17 percent) being 12 months. In 91.67 percent of cases, all follow-ups are successful. The most common recurrence level is 1 (25%). A surgical complication is a subconjunctival hemorrhage (33.33 percent). Comparing the surgeries done on people with recurrent pterygium didn't show anything important (F = 1.13, p = 0.339). Age significantly affected the recurrence of pterygium (95% CI, 6.79-63.56; OR = 20.78, P 0.001). Conclusion: This study discovered a 14.6% rate of pterygium recurrence after pterygium surgery. Across all surgeries and patients, the rate of recurrence was four times higher with the bare sclera method than with conjunctival autograft. The researchers advise selecting a more conventional surgical technique to avoid a recurrence.

Keywords: pterygium, recurrence pterygium, pterygium surgery, excision pterygium **Conference Title:** ICOO 2023: International Conference on Ophthalmology and Optometry

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