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Comparison of Conjunctival Autograft versus Amniotic Membrane Transplantation for Pterygium Surgery

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Abstract : Currently, surgery is the only known effective treatment for pterygium. In certain groups, the probability of recurrence after basic sclera excision is very significant. Tissue grafting is substantially more time-consuming and challenging than keeping the sclera uncovered, but it reduces the chance of recurrence. Conjunctival autograft surgery is older than amniotic membrane graft surgery. The purpose of this study was to compare pterygium surgery with conjunctival autograft against an amniotic membrane transplant. In the study, a randomized controlled trial was used. Four cases were ruled out (two for failing to meet inclusion criteria and the other for refusing to participate). Group I (n = 40) received the intervention, whereas Group II (n = 40) served as the control. Both descriptive and inferential statistical approaches were used, including data analysis and data analysis statistics. The descriptive statistics analysis covered basic pterygium surgery information as well as the risk of recurrent pterygium. As an inferential statistic, the chi-square was used. A p-value of 0.05 is statistically significant. The findings of this investigation were the majority of patients in Group I were female (70.0%), aged 41–60 years, had no underlying disease (95.0%), and had nasal pterygium (97.5%). The majority of Group II patients were female (60.0%), aged 41–60 years, had no underlying disease (97.5%) and had nasal pterygium (97.5%). Group I had no recurrence of pterygium after surgery, but Group II had a 7.5% recurrence rate. Typically, the recurrence time is twelve months. The majority of pterygium recurrences occur in females (83.3%), between the ages of 41 and 60 (66.7%), with no underlying disease. The recurrence period is typically six months (60%) and a nasal pterygium site (83.3%). Pterygium recurrence after surgery is associated with nasal location (p =.002). 16.7% of pterygium surgeries result in complications; one woman with nasal pterygium underwent autograft surgery six months later. The presence of granulation tissue at the surgical site is a mild complication. A pterygium surgery recurrence rate comparison of conjunctival autograft and amniotic membrane transplantation revealed that conjunctival autograft had a higher recurrence rate than amniotic membrane transplantation (p =.013).

Keywords : pterygium, pterygium surgery, conjunctival autograft, amniotic membrane transplantation
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