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Amniotic membrane transplantation with narrow-strip conjunctival autograft vs. conjunctival autograft for recurrent pterygia

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Introduction: To compare amniotic membrane transplantation (AMT) associated with narrow-strip conjunctival autograft versus conjunctival autograft alone for the treatment of recurrent pterygium.

Methods & Patients: Prospective consecutive interventional study was performed. Patients with recurrent pterygium were randomly divided into one of two groups; group 1: patients undergoing AMT associated with autologous conjunctival graft, and group 2: patients undergoing conjunctival autograft alone.

Results: Of the 80 operated eyes included in this study, 39 (Group 1, mean patient age: 52.1±11.7 SD years) underwent AMT associated with narrow-strip conjunctival autograft and 41 (Group 2, mean patient age: 45.8±12.9 SD years) underwent conjunctival autograft alone. In Group 1, 6 eyes (15.4%) had grade-1 pterygium, 19 eyes (48.7%) had grade-2 pterygium, and 14 eyes (35.9%) had grade-3 pterygium. In the second group, 5 eyes (12.2%) had grade-1 pterygium, 18 eyes (43.9%) had grade-2 pterygium, and 14 eyes (35.9%) had grade-3 pterygium. No statistically significant difference was found between the two groups (P=0.752). Of the 39 eyes in Group 1, recurrent pterygium was observed in 7 cases (17.9%). However, of the 41 eyes in Group 2, recurrent pterygium was observed in only 4 cases (9.75%). No statistically significant difference was found between the two groups (P=0.2684).

Conclusions: The results of this study indicate that conjunctival autograft alone might be a better surgical choice for the treatment of recurrent pterygia than combining it with AMT, however, this second option provides a good surgical alternative in cases where little conjunctival donor tissue is available.

Recent Publications

- 1. Taylan Sekeroglu H, Erdem E, Dogan N C, Yagmur M, Ersoz R, Dogan A (2011) Sutureless amniotic membrane transplantation combined with narrow-strip conjunctival autograft for pterygium. Int. Ophthalmol. 31(6):433-438.
- 2. Hirst LW (2009) Recurrent pterygium surgery using pterygium extended removal followed by extended conjunctival transplant: recurrence rate and cosmesis. Ophthalmology. 116(7):1278-1286.
- 3. Hovanesian J A, Starr C E, Vroman D T, Mah F S, Gomes J A P et. al (2017) Surgical techniques and adjuvants for the management of primary and recurrent pterygia. J. Cataract Refract. Surg. 43(3):405-419.
- 4. Barbosa Jr. J B, Farias, C C, Hirai F E, Pereira Gomes J A (2017) Amniotic membrane transplantation with narrow strip conjunctival autograft vs. conjunctival autograft for recurrent pterygia. Eur. J. Ophthalmol. 27(2):135-140.
- 5. Solomon A, Pires R T, Tseng S C (2001) Amniotic membrane transplantation after extensive removal of primary and recurrent pterygia. Ophthalmology. 108(3):449-460.

Biography

Sandra Moreira has her experience occupational health and safety, environmental health and public health, areas developed in entities of the ministry of health and the ministry of environment. With postgraduate in "Management and environmental policies" his research associated green jobs and occupational health issues.

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