



## TO COMPARE ADHERENCE OF CONJUNCTIVAL AUTOGRAFT BETWEEN AUTOLOGOUS PLASMA GLUE AND SUTURE TECHNIQUE IN PRIMARY PTERYGIUM SURGERY

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### SUMMARY

Pterygium is an outgrowth of conjunctiva that can spread to the corneal limbus and beyond. Treatment is by removal of pterygium and an autograft cover of the bare sclera. Autograft adherence is achieved by suturing (gold standard), fibrin glue, and recently with autologous blood. Drawbacks of the former two include cost, operation time and tissue reaction. This study focuses on using plasma from patient's own blood as a biological glue to adhere the graft after pterygium excision surgery. A comparative, prospective randomized controlled trial was conducted in 80 eyes of 80 patients with primary pterygium. 40 patients (Group 1) were treated with autologous plasma glue adhesive and 40 patients (Group 2) were treated with suture 8-0 (Vicryl). All surgeries were performed by single surgeon. Patients were assessed at 1 day, 1 week and 1-month post operation. Primary outcome is to check graft adherence. Pain and chemosis were measured as secondary outcomes. All patients were followed up to 1 month. Both groups had no detachments at 1 day (0%) and 1 week (0%). At 1 month, group 1 had 3 graft detachments (7.5%), while group 2 had one graft detachment (2.5%), however this was statistically not significant. The postoperative pain and chemosis were significantly lower in group 1 ( $P < 0.05$ ). No major complications were observed in both groups. Our results showed that autologous plasma glue technique was effective and as efficacious in securing the graft for pterygium surgeries. It showed no adverse effects on ocular tissues. Patients in plasma glue group had lesser morbidity and better quality of life. The use of autologous plasma glue in primary pterygium surgery is an equally good alternative and reduces post-operative pain and chemosis compared to suture technique.