

ABSTRACT

**COMPARISON OF CONJUNCTIVAL INFLAMMATION AFTER
PTERYGIUM SURGERY BETWEEN SUTURELESS GLUEFREE
VERSUS SUTURED IN CONJUNCTIVAL AUTOGRAFT
(Clinical Experimental Study at Rumah Sakit Mata Masyarakat
Jawa Timur)**

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Objective: To compare the outcome, conjunctival inflammation and graft stability of sutureless and glue-free technique with sutures for conjunctival autografting in management of primary pterygium.

Methods: The present study is a clinical experimental study with posttest only design, conducted on fifty three patient, from Januari to February 2018. Fourteen eyes of 14 patients with primary, nasal, grade 3 or 4 pterygium were consecutive sampling into Group 1 (n=5) (sutureless and gluefree conjunctival autograft) and Group 2 (n=9) (sutured conjunctival autograft). The outcome parameters evaluated were symptoms of pain, foreign body sensation and watering, conjunctival inflammation and graft stability at day 1, day 7 and day 21. Data analysis was done using SPSS, Mann-Whitney U test and Fisher exact test. Correlation were used for statistical analysis.

Result: Fourteen eyes from fourteen patients were enrolled the study. Statistical analysis of this study showed there was no significant difference of pain, watering and itching at day 1 ($p=0,801$; $p=0,801$; $0,505$), day 7 ($p=0,505$; $p=0,225$; $p=1,000$) and day 21 ($p=1,000$; $p=-$; $p=1,000$), but there is significant difference of foreign body sensation at day 21 ($p=0,023$). There is significant difference of conjunctival inflammation at day 7 and day 21 ($p=0,004$; $p=0,002$). There is significant difference of stability graft at day 1 ($p=0,049$). One patient had graft loss.

Conclusion: In primary pterygium, sutureless gluefree pterygium surgery with autologous in situ blood coagulum was better in symptom scores and conjunctival inflammation but graft stability was better in the suture group. Sutureless, glueless pterygium surgery with autologous in situ blood coagulum was unpredictable in graft stability. There was no statistically significant difference in the recurrence rate between the two groups. Although there is no doubt that conjunctival autograft with in situ blood coagulum has a definite role in pterygium surgery, conjunctival autograft with sutures may remain a gold standard for pterygium surgery.

Keywords: Conjunctival autograft, Gluefree, Pterygium, Sutureless