

Anterior lamellar recession versus posterior lamellar tarsal rotation for lower lid trichomatous trichiasis: a randomized controlled trial.

Abstract

Purpose: To compare the outcomes of anterior lamellar recession (ALR) versus posterior lamellar tarsal rotation (PLTR) procedure for the repair of lower eyelid trichomatous trichiasis (TT).

Design: Prospective randomized comparative trial.

Methods: Study Population and Interventions: Patients with lower eyelid TT were enrolled. Patients with a history of lower lid surgery, marked horizontal lid laxity, another evident cause for the trichiasis, and those under 18 years were excluded. Participants were randomized to either PLTR or ALR. The sequence was computer-generated by an independent statistician, and the allocation sequence was concealed in sealed opaque envelopes. Patients were evaluated at 1 week and 1, 3, 6, and 12 months. Main Outcome Measures: postoperative trichomatous trichiasis (PTT) and cosmetic satisfaction.

Results: A total of 60 patients were randomly assigned with 30 patients in each group. Two (3.3%) participants in PLTR group did not follow up and were excluded from the analysis. At 1, 3, and 6 months, PTT was significantly more frequent in the PLTR group than the ALR group (14.3% vs 0%; $p=0.048$, 25% vs 0%; $p=0.004$, 35.7% vs 10%; $p=0.019$, respectively). In the ALR group, 6 patients (20%) had PTT at their 12-month follow-up visit compared with 15 patients (53.6%) in the PLTR group ($P=0.008$) with absolute risk reduction of 33.6% (95% (CI= 9% – 58%)). Cosmetic dissatisfaction was significantly more frequent in the ALR group at the initial follow-up visits compared to the PLTR group. However, this difference was no longer significant at 6 and 12 months follow-up.

Conclusion: These data provide strong evidence that ALR is more effective in correction of lower eyelid trichomatous trichiasis with acceptable cosmesis compared with PLTR.