Comparison of postoperative eyelid position using fibrin sealant versus suture for wound closure in Muller's muscle-conjunctiva resection ptosis repair.

Authors: Czyz C.N., Rich N.E., Foster J.A., Kavanagh M.C., Perry J.D., Holck D.E.

Publication Date: 2011

Abstract:

The purpose of this study was to compare postoperative eyelid position using fibrin sealant versus suture for wound closure in Muller's muscle-conjunctiva resection ptosis repair. One hundred ninety-six patients (367 eyelids) who underwent Muller's muscle-conjunctiva resection ptosis repair were divided into two groups: wounds closed with suture and those closed with fibrin sealant. Preoperative and postoperative eyelid measurements were compared statistically using appropriate t tests. Complications, eyelid symmetry, and revision rates were analyzed using a two-tailed Fisher's exact test. Suture was used for wound closure on 53 eyelids of 39 patients and fibrin sealant was used on 314 eyelids of 157 patients. There was no statistically significant difference ($p = 0.49$) when comparing the change from preoperative to postoperative margin-to-reflex distance 1 between the two groups. Postoperative symmetry within 0.5 mm was achieved in 87 percent of patients in the suture group and in 96 percent of patients in the fibrin sealant group ($p = 0.06$). The percentage of patients requiring additional ptosis adjustment was 2 percent in both groups ($p = 1.0$). Major complications were more common in the suture group ($p = 0.0001$). Muller's muscle-conjunctiva resection ptosis repair using fibrin sealant for wound closure offers equivalent lid position and symmetry as compared with suture wound closure. There is also a reduction in major postoperative complications when using fibrin sealant.