A Comparative Study of Three Different Surgical Techniques in management Of Simple Congenital Ptosis

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ABSTRACT

Background: One of the most typical eyelid abnormalities seen in ophthalmology clinical practice is blepharoptosis. It describes an abnormal drooping of the eyelid that may be unilateral or bilateral. The levator palpebrae superioris and the Muller's muscle, which raise the eyelid, are often partially or completely dysfunctional.

In order to examine three distinct levator muscle procedures, including levator resection, plication, and modified resection techniques, this research was created as a prospective, randomized clinical trial.

Methods: A total of 60 patients with mild to moderate congenital ptosis and fair to good levator function were divided into three groups in this prospective, randomized, controlled study. Group (A) underwent traditional levator resection, Group (B) underwent levator plication, and Group (C) underwent modified levator resection to correct their ptosis.

Results:

Functional results:

The postoperative comparison of MRD1 in the 3 groups showed that MRD1 was measured over 6 months post-surgery and showed statistically significant differences among the three studied groups 1 week, 1, 3 and 6 months postoperatively**.** The post-hoc comparison showed that at 1 week postoperatively, the MRD1 was lower for the modified resection and plication as compared to the resection. The post-hoc comparison showed that at 1 month, 3 months, and 6 months postoperatively, the MRD1 was lower for the modified resection as compared to resection.

Cosmetic evaluation:

Cosmetic outcomes were assessed by (lid height, crease and contour) which show three levels or degrees; For height; poor means (2mm < lid height difference), good means (1mm < lid height difference <2mm), and excellent means (<1mm of lid height difference). For crease; poor means (complete obliteration of lid crease), good means (mild obliteration causing asymmetry, but acceptable), and excellent means (symmetric without obliteration). For contour; poor means (Eyelid tenting needed to be corrected), good means (Mild peaking or flattening, but acceptable to parents and doctors), and excellent means (Natural, symmetric contour without peaking or flattening).

Conclusion: Levator resection is effective functionally and cosmetically for treatment of mild to moderate congenital ptosis with lower recurrence rates as compared to other techniques.