Modifiable amplified rectus muscle transposition fine surgery with or without ciliary vessel sparing

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Introduction: Vertical rectus transposition (VRT) is useful in Duane syndrome and abducens palsy. However, many clinicians avoid transpositions due to the risk of induced vertical deviations and over-corrections.

Objective: Posterior fixation sutures enhance the effect of VRT, but preclude the use of adjustable sutures. An adjustable augmented VRT with or without ciliary vessel-sparing is described.

Methods: Partial or full tendon VRT augmented by resection of the transposed muscles. Ciliary vessels were preserved by either splitting the transposed muscle or by dragging the transposed muscle without disrupting the muscle insertion.

Results: Six patients with abducens palsy and one with eso-Duane syndrome were included. Mean follow up was 2.2±2.2 months. Resection of 3-5 mm was performed in all patients. Pre-operative central gaze esotropia of 32.6±12.6 PD (range, 18-50) decreased to 8.7±7.4 PD (range, 0-18) at the final visit (p=0.002). Two patients required post-operative adjustment with recession of one of the transposed muscles due to an induced vertical deviation with overcorrection. At the final visit, one patient had a vertical deviation &lt; 4 PD and none had overcorrection or anterior segment ischemia.

Conclusion: Augmentation of VRT by resection of the transposed muscles can be performed with adjustable sutures and vessel-sparing technique. This allows for postoperative control of overcorrection and induced vertical deviation as well as less risk of anterior ischemia.

Biography
Mohamed Mostafa Kamel Diab has completed his PhD from Ain Shams University and Postdoctoral studies from Ain Shams University School of Medicine, Cairo, Egypt. He is a Professor of Ophthalmology, Ain Shams University, Cairo, Egypt and Consultant Ophthalmology Magrabi Hospital, KSA. He has published 16 international papers in reputed ophthalmology journals.

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