**Myectomy and myotomy in situ for benign essential blepharospasm**

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**Introduction**

Blepharospasm is part of a spectrum of facial dystonia which can result in significant psychological and social distress to patients. Currently, mainstay treatment of blepharospasm is botulinum A.[1] Myectomy is reserved for patients have poor responses to botulinum toxin. Myectomy for benign essential blepharospasm decreases the morbidity, botulinum toxin treatment frequency, and long-term expense associated with this disabling condition[2]. However, myectomy can result in hollowing appearance and unpleasant cosmetic outcomes[3]. We use a modified surgical method of preseptal orbicularis oculi myectomy and orbital orbicularis myotomy in situ for patients with benign essential blepharospasm to achieve satisfying outcomes in function and aesthetics.

**Material and Methods**

Between January, 2012 to October, 2014, we enrolled patients with benign essential blepharospasm who had poor response to botulinum toxin. Associated ptosis and dermatochalasis were assessed preoperatively. We performed upper and lower eyelid preseptal orbicularis oculi myectomy with orbital orbicularis myotomy in situ on these patients under general anesthesia. Simultaneous upper blepharoplasty and levator aponeurosis plication were also performed to correct dermatochalasis and ptosis.

**Results**

There were eleven patients underwent upper and lower eyelid myectomy with myotomy in situ. Three were male and the other was female. Average age is sixty-one. Mean follow-up time was 27.25 moths. Treatment interval of botulinum toxin injection before surgery was 10.2 weeks in average, which increased to 16.4 months after surgery. Subjective improvement in average was 75%. Blepharospasm function disability score was 12 in average, and improved to 6 in average.

**Conclusions**

This is a new surgical method for refractory benign essential blepharospasm. In

comparison to previous limited upper myectomy, preseptal orbicularis oculi myectomy and orbital orbicularis myotomy in situ preserve the muscle volume and thus provide better aesthetic outcome without compromise of functional result in our experience.

**Reference**


1. Pariseau B, Worley MW, Anderson RL. Myectomy for blepharospasm 2013. Current opinion in ophthalmology 2013;24:488-93.
2. Kent TL, Petris CK, Holds JB. Effect of upper eyelid myectomy on subsequent chemodenervation in the management of benign essential blepharospasm. Ophthalmic plastic and reconstructive surgery 2015;31:222-6.
3. Yen MT, Anderson RL, Small RG. Orbicularis oculi muscle graft augmentation after protractor myectomy in blepharospasm. Ophthalmic plastic and reconstructive surgery 2003;19:287-96.