

신경근육재활 및 전기진단

게시일시 및 장소 : 10 월 18 일(금) 13:15-18:00 Room G(3F)

질의응답 일시 및 장소 : 10 월 18 일(금) 15:45-16:30 Room G(3F)

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Double eyelid tape use in severe ptosis in myotonic muscular dystrophy patient

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Introduction

Myotonic muscular dystrophy is a genetic disorder progressively affects muscles of whole body. Limb weakness and intellectual disability, cardiopulmonary complications and cataracts are well known symptoms of myotonic muscular dystrophy. It can also affect levator palpebrae superioris muscles, resulting in severe ptosis, and which can further deteriorate rehabilitation of the patients. However, surgical options frequently are not possible because of many complications. Although not described in the literatures, a double eyelid tape, usually used for cosmetic purposes, can be simple and effective management. We report a case of myotonic muscular dystrophy that used this easy-to-apply technique for management of ptosis with quantitative outcome measures.

Case

A 52 year old man diagnosed as myotonic muscular dystrophy in 2010 was admitted to department of physical medicine and rehabilitation for pulmonary rehabilitation and ventilator setting. In the physical examination, manual muscle power was fair grade in both proximal upper and lower extremities and poor in distal upper and lower extremities. He showed severe ptosis for 1 year which restricted his visual field thus he could not concentrate to rehabilitation training. We consulted to ophthalmologist for operation but due to his weakness of levator palpebrae superioris, the levator resection operation could not be effective. Another option, frontalis sling is also not suitable to this patient because he showed no Bell`s phenomenon for protecting cornea which would lead to exposure keratitis. We tried to seek other conservative managements, and applied double eyelid tape. This tape, 2 mm width was widely used to make double eyelid for cosmetic purpose. We applied it at 2 mm above superior marginal cilla. The palpebral fissure heights and visual fields for ophthalmologic measure, and modified Bathel index for functional measure were compared before and after the intervention. After applying double eyelid tape, there was distinct increase in palpebral fissure height on both eyes (Fig. 2) compared to before applying it. (Fig. 1). The area of visual field also showed significant increase (Fig. 3). The modified Bathel index scored 36 at first admission improved to 41 by the point of

discharge. No ophthalmologic and/or skin problems were found related with using this eyelid tape.

Conclusion

In a middle-aged man with myotonic muscular dystrophy, severe bilateral ptosis prevented him from successful rehabilitation, but no proper surgical managements were possible. After using double eyelid tape, improvement of visual function with increased palpebral fissure height as well as visual fields enabled the patient to participate in rehabilitation program much easier, resulting in higher functional outcome. Disposable double eyelid tapes can be a safe, simple, and highly efficient solution for the patients with severe ptosis due to myotonic muscular dystrophy.

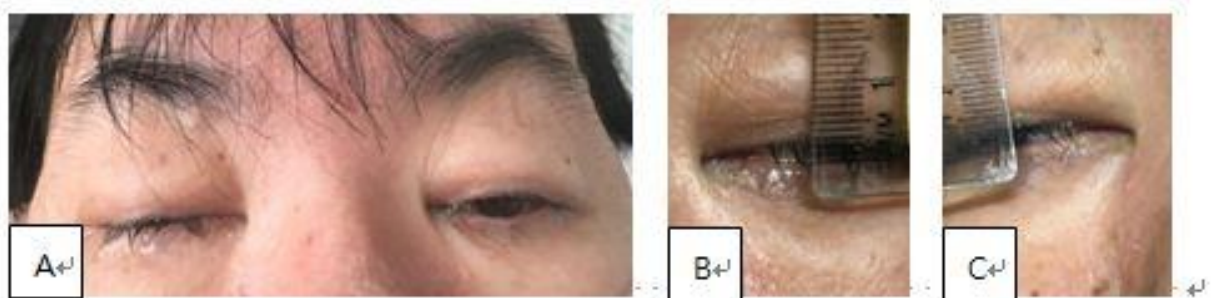


Figure. 1 Clinical photographs of severe ptosis in a 52-year man with myotonic muscular dystrophy before applying double eyelid tape. (A) General view (B) Lt. eyelid before apply (C) Rt. eyelid before apply



Figure. 2 Clinical photographs of severe ptosis after applying double eyelid tape. Note the increase of palpebral fissure height. (A) General view (B) Lt. eyelid after apply (C) Rt. eyelid after apply

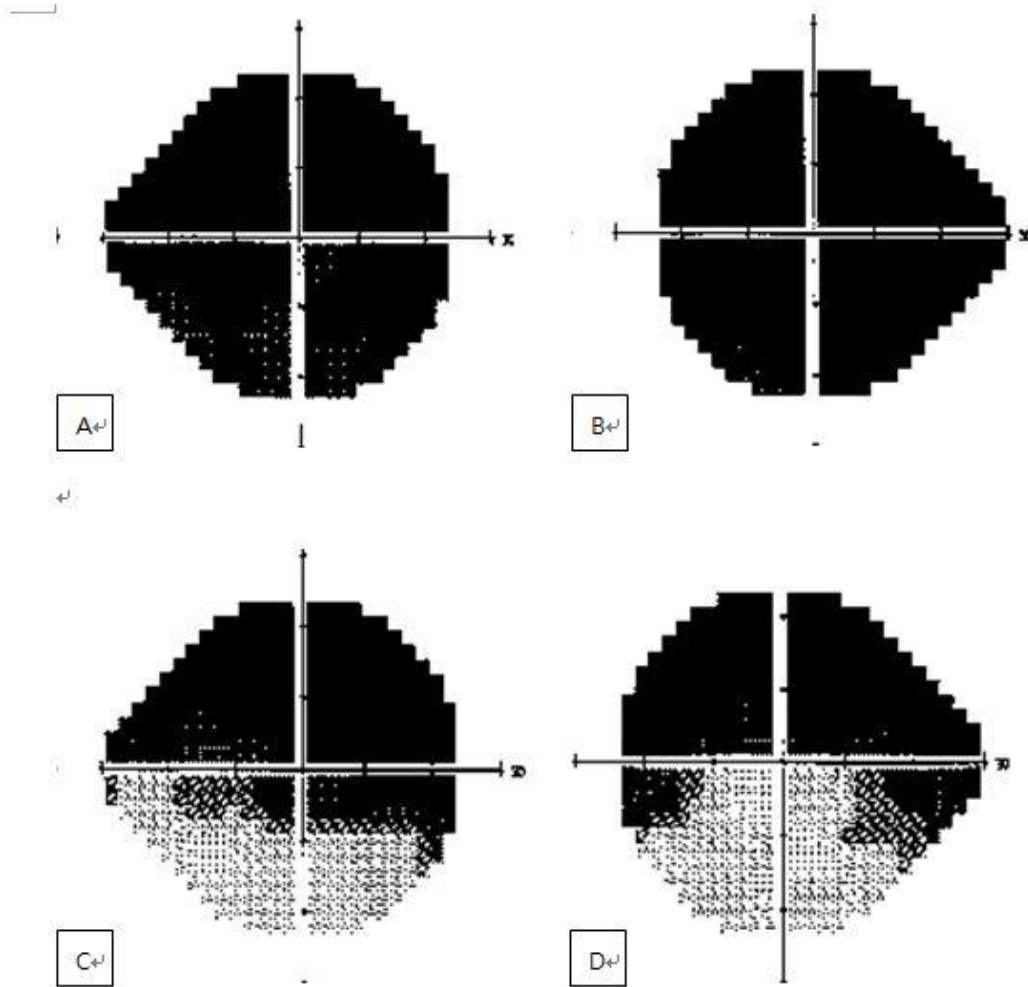


Figure. 3. Visual field. (A) Rt. visual field before double eyelid apply (B) Lt. visual field before double eyelid apply (C) Rt. visual field after eyelid apply (A) Lt. visual field after double eyelid apply