

A degree of reporting bias may exist in the sample that responded to our questionnaire and this may have skewed the results. We believe this to be limited as our purpose was to explore individual experiences and determine if there was a general consensus among the array of measures that exists.^{2,4-6} Although the prevalence, incidence, and associated risk factors of IFIS are not yet known, it is important for ophthalmologists to anticipate the potential operating difficulties with IFIS and be aware of the wide range of management options available.

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References

- 1 Chang DF, Campbell JR. Intraoperative floppy iris syndrome associated with Tamsulosin. *J Cataract Refract Surg* 2005; **31**: 664–673.
- 2 Gurbaxani A, Packard R. Intracameral phenylephrine to prevent floppy iris syndrome during cataract surgery in patients on Tamsulosin. *Eye* [November 11; E-pub ahead of print].
- 3 Settas G, Fitt AW. Intraoperative floppy iris syndrome in a patient taking alfuzosin for benign prostatic hypertrophy. *Eye* 2006 [February 24; E-pub ahead of print].
- 4 Arshinoff SA, Wong E. Understanding, retaining and removing dispersive and pseudodispersive ophthalmic viscosurgical devices. *J Cataract Refract Surg* 2003; **29**: 2318–2323.
- 5 Oetting TA, Omphroy LC. Modified technique using flexible iris retractors in clear corneal surgery. *J Cataract Refract Surg* 2002; **28**: 596–598.
- 6 Chan DG, Francis IC. Intraoperative management of iris prolapse using iris hooks. *J Cataract Refract Surg* 2005; **31**: 1694–1696.

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Sir,

Ptosis caused by orbicularis myokymia and treated with botulinum toxin: a case report

Myokymia is a manifestation of peripheral nerve disease and classified as excess motor unit activity.

Electrophysiologically, it consists of rhythmic or semirhythmic bursts of grouped motor unit potentials occurring at a uniform rate of 2–60 Hz, usually with 2–10 U within a burst.^{1,2} We present a 23-year-old lady who presented with left upper eyelid ptosis caused by orbicularis myokymia and treated with botulinum toxin injection.

Case report

A 23-year-old systemically healthy lady presented with complaints of ptosis of the left upper eyelid, present persistently since 3 months.

On examination, the best-corrected visual acuity was 6/6, in both eyes. The left upper eyelid was 1 mm lower in position and the lower eyelid was 1 mm raised, compared to the right eye. There was increased tone noted in the lower eyelid pretarsal orbicularis (Figure 1a). The left upper eyelid showed the presence of constant, rhythmic, fibrillations. The ptosis was constant, on evaluation on three different days, for an hour each. Post-closure, the upper eyelid was also slower to open. The levator action was 15 mm and the lid crease height was 8 mm, in both eyes. Remaining ocular examination was unremarkable.

Magnetic resonance imaging of the central nervous system was unremarkable. Special attention was paid to the VII nerve complex and the cerebropontine angle to rule out a dolichoectatic basilar vessel compression on the VII nerve, as a possible cause. Electro-myography of the left orbicularis muscle was performed and demonstrated over-activity (Figure 1b).

The patient was diagnosed to not only have upper eyelid ptosis, but also reversed ptosis of the lower eyelid; due to increased tone of the orbicularis oculi.

A total of 5 U of botulinum toxin – A injection (Botox, Allergan, Irvine, CA) was given in two locations, intradermally and pretarsally, to the left upper eyelid and to the lower lid, respectively. The orbicularis activity

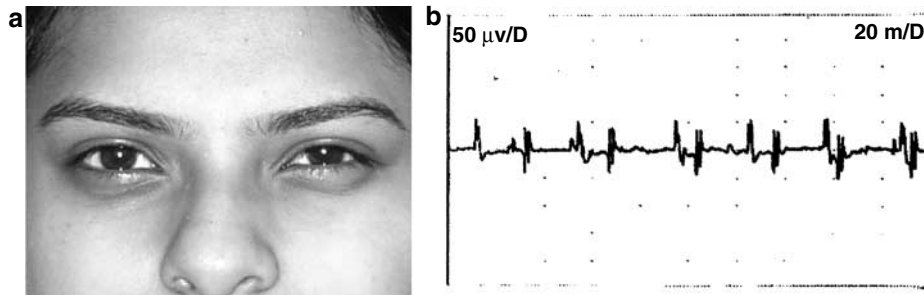


Figure 1 (a) Orbicularis myokymia causing ptosis: external photograph of patient, showing left sided mild upper eyelid ptosis and lower eyelid reverse ptosis, with increased tone of the lower pretarsal orbicularis. (b) Orbicularis myokymia causing ptosis: electromyography of the left orbicularis muscle demonstrating repetitive grouped motor potentials.



Figure 2 Orbicularis myokymia causing ptosis: external photograph of patient, post-botulinum injection, demonstrating symmetrical palpebral apertures.

subsided completely within a week and the ptosis was corrected completely (Figure 2).

The patient was followed-up at 3 monthly intervals and there was no recurrence of the ptosis, on last follow-up, a year later.

Discussion

Overactivity of the orbicularis oculi presents with a reduced palpebral aperture simulating ptosis, due to a disparity between the eyelid closing (orbicularis oculi) and eyelid opening (levator palpebrae superioris) muscles. Treatment consists of botulinum toxin injection to paralyse the orbicularis oculi. Injection needs to be given carefully, as if it is given too deep in the pretarsal area, spread of the drug to the underlying Muller's muscle may actually worsen ptosis. This was especially important, as our patient was cosmetically extremely conscious. Postinjection massage should be avoided to prevent deeper migration of the drug.

To summarize, we report the case of a 23-year-old lady with orbicularis myokymia causing unilateral mild ptosis, treated successfully with botulinum toxin injection.

The authors do not have any financial interest in the materials and methods used in the study.

References

- 1 Lo YL, Ho SC, Koh LK, Khoo DH. EMG myokymia as a cause of ptosis in hypothyroidism. *Eur J Neurol* 2003; **10**: 87–90.
- 2 Hart IK, Maddison P, Newsom-Davis J, Vincent A, Mills KR. Phenotypic variants of autoimmune peripheral nerve excitability. *Brain* 2002; **125**: 1887–95.

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