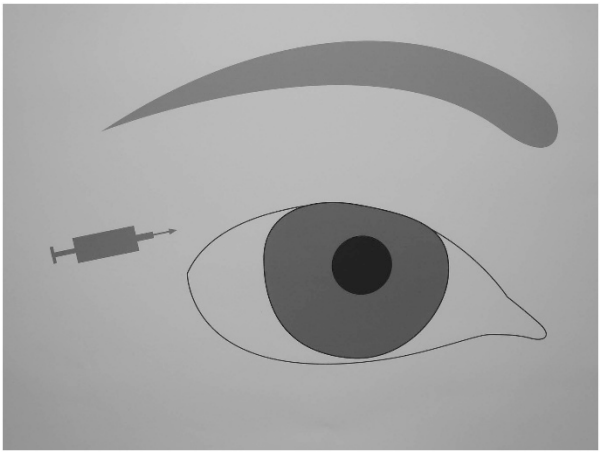

Figure 2 Injection of Botulinum toxin into the pretarsal orbicularis oculi.

a case of congenital lower lid entropion in a 3-week old baby that responded to 5 U injection of Botulinum toxin, although the type of Botulium toxin was not stated.

In our case the upper lid entropion did not recur after the Botulinum toxin worn off. We suggest two possible mechanisms, either the cycle of orbicularis spasm due to irritation from the entropion was broken by the treatment or that facial growth changed the balance of the inverting effect of the orbicularis over the stability of the posterior lamellae. Children with epiblepharon commonly improve as the midface grows during childhood.[5]

To our knowledge this is the first reported case of acquired lateral upper lid entropion in a child treated with Botulinum toxin. We suggest that this treatment could be used in children with entropion, where there is no obvious underlying cause.

Conflict of interest

The authors declare no conflict of interest.

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Sir,

Systemic toxicity of topical cyclopentolate eyedrops in a child

Topically applied ophthalmic medications may sometimes get absorbed into the systemic circulation and lead to significant toxicity. We, herein, report a case of systemic toxicity of topical cyclopentolate eyedrops in a young child.

Case report

A 5-year-old boy presented to paediatric OPD with complaint of progressively diminishing distant vision since 2 years of age. He had normal general physical and systemic examination. Ocular movements and light and accommodation reflexes were bilaterally normal. For fundus examination, he was advised to instill 1% cyclopentolate eyedrops, two drops in each eye, three times at 15 min intervals. However, the father inadvertently instilled it five to six times over 2 h. After another 1 h, he reported again to our OPD with altered behaviour, visual hallucinations, and difficulty in walking. He was disoriented, with ataxic gait and slurred speech. Pupils were widely dilated and fixed (effect of cyclopentolate). Rest of the examination was unremarkable.

Based on these findings and their temporal relation to overdose of cyclopentolate eyedrops, a diagnosis of cyclopentolate toxicity was made. His symptoms gradually resolved over the next 6–8 h. He was discharged after 24 h of observation.

Comment

Cyclopentolate is a synthetic anticholinergic agent and causes rapid-onset cycloplegia.[1] Onset is within 30–60 min and effects last up to a day.[2] Cyclopentolate eyedrops pass readily through nasolacrimal duct and are well absorbed locally as well as systemically through conjunctiva and nasal mucosa. Systemic absorption also occurs through oropharynx, digestive system, and skin.[3,4]

There have been various reports of systemic toxicity following topical application of cyclopentolate eyedrops.[3–7] Children are especially prone due to lower body weight. Various manifestations in children include flushing, tachycardia, feeding intolerance, seizures, and drowsiness. Behavioural changes and transient psychotic reactions may also occur.[7] Physostigmine is the antidote of choice as it readily crosses the blood–brain barrier. Commonly used anticholinesterases such as neostigmine, pyridostigmine, and edrophonium do not cross the

blood–brain barrier, and are not useful.[8] We could not use physostigmine due to non-availability.

This case highlights the importance of caution to be exercised while using topical ophthalmic preparations in children. Physicians should be well aware of their pharmacology and use them judiciously.

Conflict of interest

The authors declare no conflict of interest.

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Sir,

Comment on 'Corneal hysteresis in patients with dry eye'

We read with interest Firat and Doganay's[1] recent report on effects of dry eye on corneal biomechanics. We propose the authors missed the opportunity to review an interesting hypothesis because of inadequate study design and methodology. Whereas the report aimed to determine effects of dry eye, the disease classification and study enrolment criteria were poorly defined. We would like to bring to the authors attention the International Dry Eye Workshop report (2006) that provides a standardized classification for diagnosis and grading severity of dry eye.[2] Including patients with significant ocular surface disorders may have allowed accurate conclusions. The absence of significant difference in corneal thickness probably reflects milder disease in the study group.[3]

Goldman applanation tonometry (GAT) is based on assumptions of the tear film and known to be affected by the central corneal thickness. The Ocular Response Analyzer (ORA; Reichert Ophthalmic Instruments, Buffalo, NY, USA) is a non contact tonometer that measures the biphasic corneal response to generate a cornea compensated intraocular pressure (IOPcc). The more interventional contact GAT measurements were surprisingly recorded earlier in the sequence of measurements. Data for analysis and comparison of IOP between the two instruments or even the Goldmann-correlated IOP measurement, IOP_G (average of the biphasic pressure readings generated by the ORA) *vs* IOP_{CC}, are not provided. The results are duplicated in text and bar chart format, as opposed to use of a scatter plot with range of measurements and do not contribute to the discussion.

The authors' hypothesis on effect of dry eye in IOP measurements (traditional and newer cornea compensated values) and corneal biomechanics can have important clinical implications. However, the lack of definition and severity grading of dry eye makes it difficult to draw accurate conclusions.

Conflict of interest

The authors declare no conflict of interest.

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