

improvement. Subsequently, two bevacizumab injections were administered over 2 months with the last one being 4 weeks ago. On examination, visual acuity was 20/50 in the right eye and CF at 2 ft in the left. The left eye had a disciform scar due to choroidal neovascularization. Best-corrected visual acuity was 20/40 in the right eye 1 month ago. Fundus examination showed a well-demarcated area of geographic atrophy, an elevated lesion (characteristic of pigment epithelial detachment (PED)) with haemorrhages at the periphery and sub-retinal fluid. In addition, there was a lesion in the posterior pole clinically resembling a retinal tear. Spectral domain optical coherence tomography (OCT) confirmed a retinal pigment epithelial (RPE) tear with intact retina. Figure 1 shows the SD-OCT with a hyperfluorescent layer, representing the RPE layer. There is a focal disruption in the RPE with the overlying retinal integrity maintained. The patient was observed closely and bevacizumab injections were continued monthly. The patient's vision has remained stable in the right eye for 5 months.

Comment

The incidence of RPE tear is 1–27% following treatment with anti-VEGF therapy.^{1–3} RPE tears are most often associated with PED,¹ with height and diameter of PED reported as risk factors.^{3,4} After anti-VEGF injections, tears are attributed to the rapid contraction of the neovascular membrane resulting in significant tangential stress on the RPE.¹ They are reported to occur most often between 4 and 8 weeks of initiation of anti-VEGF therapy,^{1,5} such as in our patient. Although RPE tears occur spontaneously, the temporal relationship between the anti-VEGF injection and the tear must be taken into consideration. Treatment of RPE tear is not well established. However, similar to our patient, continuation of anti-VEGF therapy has been reported to stabilise visual acuity.¹ Vision should improve provided the fovea is not involved.²

Conflict of interest

The authors declare no conflict of interest.

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Sir,

Eyelid anaesthesia using tetracaine gel in the treatment of paediatric superglue tarsorrhaphy

We report a novel technique of topical eyelid anaesthesia to permit treatment of ocular superglue injury in a child, thereby avoiding the need for general anaesthetic.

Case report

A five-year-old girl presented to Ophthalmic A&E 1 h following accidental instillation of cyanoacrylate nail bonder into her right eye. The eyelids were completely glued together. The globe could not be seen but was felt to be mobile. After discussion with the mother, an initial attempt at cutting the eyelashes was made, but the lashes could not be trimmed to less than 3 mm as this caused discomfort (Figure 1a). As a result, tetracaine 4% gel (Ametop, Alcon Laboratories (UK) Ltd, Hemel Hempstead, UK) was applied onto the upper and lower eyelids (Figure 1b). After 15 min, there was adequate eyelid anaesthesia for the eyelashes of the lower lid to be cut one-by-one at their base using Vannas scissors with the child awake and supine. This allowed the eye to open completely revealing no corneal damage (Figure 1c). She was treated with oc dexamethasone/neomycin/polymyxin B (Maxitrol, Smith & Nephew Healthcare Ltd, Hull, UK) q.i.d. for a week and made a full recovery (Figure 1d).

Comment

Several reports of superglue (cyanoacrylate) causing ocular injury have been documented over the last three decades.^{1,2} Cyanoacrylate adheres most strongly to dry surfaces such as the eyelid margins and the eyelashes. This can cause the lids to rapidly bind shut, termed a 'superglue tarsorrhaphy', making examination and irrigation impossible.² Conservative management is often adopted as the glue spontaneously comes off within a week.³ In younger children, however, there is a concern that unilateral visual deprivation for that period may cause amblyopia, and therefore cutting the lashes

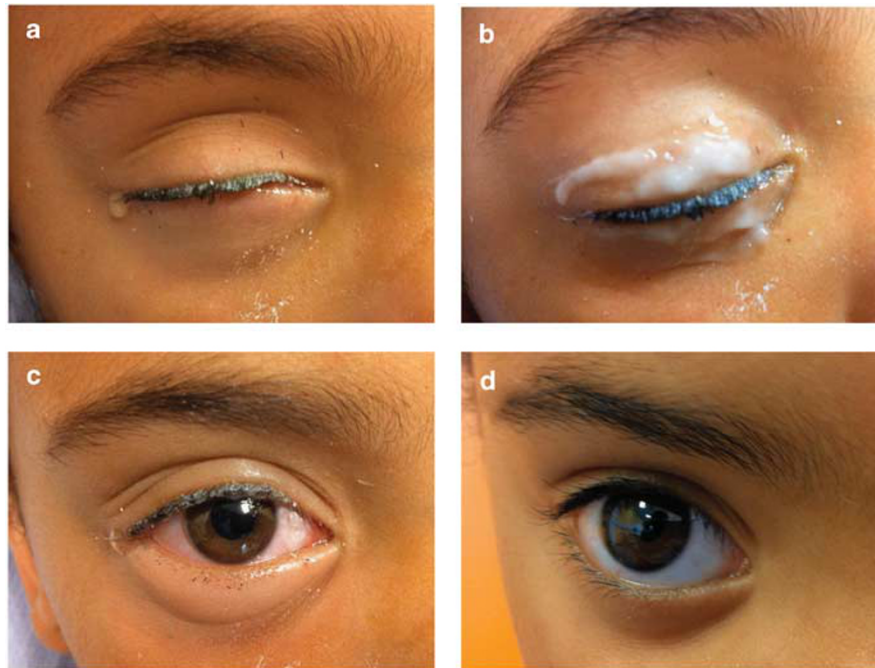


Figure 1 (a) Initial superglue tarsorrhaphy after trimming of lashes to 3 mm. (b) Tetracaine gel was applied to both upper and lower lids. (c) This provided sufficient anaesthesia so that the lower eyelashes could be cut at their bases and the eyelids separated. (d) The patient at follow up, a month later, showing re-growth of the lashes.

and separating the eyelids has been recommended.^{1,4} Unfortunately this is poorly tolerated by children and often requires a general anaesthetic.^{1,4}

Topical skin anaesthetics such as tetracaine gel are widely used in paediatrics, and similar formulations such as lidocaine/prilocaine 5% (EMLA) have also been used safely in eyelid surgery.⁵ To our knowledge, this is the first report of this type of treatment for superglue tarsorrhaphy. This simple and well-tolerated anaesthetic technique has the potential for avoiding the need for a general anaesthetic if waiting for spontaneous opening is not considered appropriate.

Conflict of interest

The authors declare no conflict of interest.

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Sir,
Why we get a blue stain

We wish to add our comments to the recent review article describing the use of trypan blue (TB) in anterior segment surgery.¹ To understand its potential uses, we need some knowledge of its biochemistry. TB ($C_{34}H_{23}N_6O_{14}S_4Na_4$) is a negatively charged, water soluble bis-axo dye that is used in cell biology to confirm cell viability. The selectively permeable cell membrane of viable cells does not allow this 'foreign' chemical to enter and hence appear colourless while the uptake in dead cells results in a blue discolouration. Similarly, TB will delineate collagen type IV-rich membranes. Both these properties are utilized in ophthalmology, the former in highlighting viable cells after conjunctival brush cytology, the latter in staining the anterior lens capsule (as well as ILM and ERM tissue).² Permanent discolouration is avoided by dilution with balanced salt solution. TB also stains poorly hydrated tissues better than well-hydrated ones explaining the contrast seen between the acellular lens capsule and the water-rich cells of the cortical lens.