EDITORIAL

RECURRENT EROSION SYNDROME

Recurrent erosion syndrome (RES), an instability of the corneal epithelium, resulting in repeated debridement of the affected area is a frustrating and painful condition. It is associated with a number of anterior corneal dystrophies and trauma. The end result is an abnormal formation of hemidesmasomes or anchoring fibrils at the basal layer of the epithelium. Currently employed means of treatment are generally aimed at prevention of the repeated separation of the epithelial cells. To this end the use of supersoft paraffin ointment, applied liberally at night, is most effective. In time, adequate anchoring filaments do form and the condition resolves. Bandage contact lenses have also been used to similar effect. A more mechanical approach was described by McLean *et al.*[1] who used micropuncture of the anterior 1/3 of the cornea below the visual axis. The multiple cuts in Bowman's membrane encouraged the formation of tiny scars which seem to secure the epithelium, limiting recurrences. This approach appears to be more effective for those cases associated with minor trauma rather than the true dystrophies such as map, dot, fingerprint, line dystrophy. The disadvantage is that scars persist and the visual axis must be avoided otherwise vision will be lost. This issue of Eye contains papers which shed new light on the condition and its treatment. Hope-Ross *et al.*[2] appear to have made a new observation, that recurrent erosion may be associated with Meibomian gland dysfunction, in general, and rosacea-like features, in particular. Hope-Ross *et al.*[3] have followed up this conclusion logically and used oral tetracycline to alter the Meibomian gland function with significant reduction of the erosions. Quite what the role of the meibomian glands might be in the pathogenesis of RES is not clear. Although this observation may be solely an epiphenomenon, it seems reasonable to assume that a further risk factor has been identified and alteration of the tear film may influence corneal epithelial healing.

At the other end of the technological spectrum, O'Brart *et al.*[4] have demonstrated that excimer laser photokeratectomy may have a role in the management of RES. At first sight this might appear to be taking a very big sledge hammer to crack rather a small egg but there is some hope that the technique may prove useful for some of the more difficult cases. If it can aid healing in some of the anterior membrane dystrophies by smoothing the irregular anterior surface of Bowman's membrane, then it may be worthwhile; otherwise the disadvantages are similar to anterior stromal puncture in that the visual axis needs to be avoided to prevent refractive change and the cost will clearly rule it out as a treatment mode in all except a very few centres.

RES is clearly a common condition but as yet there is no real consensus as to the best method for treatment. Surely it would be a simple matter to organise a prospective randomised control study to identify the most effective (and cost-effective?) way to deal with this condition.

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References

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