

COMMENT: 'RESULTS OF SURGICAL PROCEDURES FOR THE CORRECTION OF FOOT-DROP AND OF LAGOPHTHALMUS DUE TO LEPROSY'

Sir,

As an ophthalmologist with a special interest in ocular leprosy, I was struck by the results of temporalis muscle transposition (TMT) surgery in 'Results of surgical procedures for the correction of foot-drop and of lagophthalmus due to leprosy' by Weber *et al.* (*Lepr Rev*, 1992; **63**: 255-62).

Such retrospective studies are understandably hampered by missing data preoperatively, and a lack of selection criteria for surgery, which makes a final evaluation difficult. Nevertheless, the study shows that it is highly useful to reflect on follow-up data of surgical procedures.

The purpose of the fairly complicated TMT surgery, to be followed by extensive physiotherapy, is to achieve a kind of 'spontaneous regular blinking', whereas other types of lid surgery for lagophthalmus aim only at protection of the eye by the narrowing of the lid gap and acceptable cosmesis. It is therefore unfortunate that the authors, at their final examination, do not mention 'spontaneous regular blinking', nor whether the eyes were closed during sleep. It is well-known that these functional results after TMT are often disappointing.

Corneal anaesthesia is considered a contra-indication for TMT surgery, because patients with loss of corneal sensation do not feel any urge to blink. It is therefore surprising that 19 out of 33 eyes with lagophthalmus (57%) had anaesthetic corneas at the time of evaluation. It is questionable whether the corneal anaesthesia could have developed secondarily, due to persisting exposure after the TMT procedure. The comment 'closing slowly' in 4 eyes probably means that although the patients could close their eyes with effort, the eyes in daily life were continuously open and exposed.

It is equally surprising that 5 eyes (15%) were found to be blind (WHO definition of visual acuity of <0.05). One wonders if blindness due to corneal ulcer or opacity was already present preoperatively or developed after surgery, due to lack of blinking and persistent exposure. The latter seems more probable as no sensible surgeon would do such elaborate surgery on already blind eyes.

Altogether, although the lid gap on intentional closing was ≤ 2 mm in the majority of the patients the final results were poor, with 15 eyes having corneal opacities, corneal ulcer or keratitis, of which 5 of these were blind.

The authors rightly state that 'patients should only stay away from work or should be cared for in hospitals as short a time as possible'. The results of TMT, as mentioned above, therefore do not seem to justify the complicated surgery and intensive physiotherapy required. A possible exception could be made for young, intelligent, and highly motivated patients with a large lid gap but clear corneas with good corneal sensitivity. Temporalis transfer procedures remain indicated for the correction of lower facial palsy¹ in which no ready alternatives are available, but again only in highly motivated and intelligent patients.

Ophthalmologists consider simple mechanical narrowing of the lid gap as the treatment of choice for established lagophthalmus (lid gap of > 5 mm). This is relatively simple surgery which can be taught to people with limited surgical experience and does not require physiotherapy. It can be done on an outpatient basis, if necessary. There is a great variety in procedures, for example tarsal strip procedures,^{2,3} ectropion correction by wedge excision⁴ or, in basic circumstances, by simple tarsorrhaphy.⁵

However, the same kind of follow-up study is urgently needed on the results of treatment of lagophthalmus by lid surgery alone.

Furthermore, all patients with lagophthalmus should be encouraged to wear sunglasses for additional protection and, if reasonable, to use artificial tears and ointment at night.

Above all, all efforts should be aimed at identifying patients with a reversal reaction in the face

and an early lagophthalmus of less than 6 months duration, for treatment with a course of systemic steroids as for RR, in order to prevent or restore the facial palsy.⁶

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