



*Leprosy and cataract*

*Photo: Margreet Hogeweg*

adverse events occur. People with lagophthalmos of 5mm or less should be followed 6 monthly.

## Lagophthalmos Surgery

The indications for referral for surgery are lagophthalmos of 5mm or more; any degree of lagophthalmos if reduced corneal sensation is found by the supervisor; any degree of lagophthalmos in a one-eye patient; and for cosmetic reasons.

The aim is to narrow the lid gap and cover the cornea. There is no agreement as to the best procedure, whether tarsorrhaphy, or horizontal lid shortening, including reconstructing the canthus. Temporalis muscle transfer is not suitable for routine use.

We need to improve the type of surgery, and obtain evidence as to what is the best procedure. We also need to understand why patients are not prepared to accept this surgery.

## Cataract Surgery

In the past, because of small pupils, synechiae, iris atrophy, and the demonstration of the presence of leprosy bacteria in the iris even after a full course of MDT, Ophthalmologists have been reluctant to insert IOLs after cataract surgery. This is changing, and very good results with posterior chamber IOLs were reported at this Workshop. Apart from the improved optical results, IOLs avoid the problem of

wearing aphakic spectacles when the bridge of the nose has collapsed, or the problem of handling them with deformed hands. Some surgeons use frequent topical steroid drops or systemic steroids post-operatively to reduce the risk of post-operative inflammation.

## Conclusions

The gradual change-over from vertical leprosy programmes to an integrated programme for leprosy sufferers increases the responsibility on the staff of the eye care programmes to ensure that the patients are examined and operated on at the right time, and that general health workers are trained in leprosy eye care.

## Reference

- 1 Weekly Epidemiological Record. 2000; No 28, 14 July; 75:226-231

or [www.who.int/lep/disease/wer7528.pdf](http://www.who.int/lep/disease/wer7528.pdf)

## Recommendations

**Paul Courtright DrPH**  
*BC Centre for Epidemiologic & International Ophthalmology*  
*St. Paul's Hospital, 1081 Burrard Street*  
*Vancouver, BC, V6Z 1Y6*  
*Canada*

1. It is critical that leprosy patients (during their anti-leprosy treatment and after release from treatment) are integrated into general health and eye care programmes.
2. Integration will require close collaboration between leprosy control and prevention of blindness programmes. At the national, regional and local level, strong political commitment (including professional organisations) is needed. Integration will reinforce and complement Vision 2020 initiatives and support leprosy control activities.
3. Cataract is the leading cause of blindness in leprosy affected persons and many do not have access to general eye care services. All persons affected by leprosy should have equal access to eye care services. Education of health workers (including eye care staff) is required to ensure that leprosy patients gain access to eye care facilities.
4. At the time of disease diagnosis all patients should be examined for lagophthalmos (any gap), visual acuity, the red eye, and presence of a facial skin patch. All patients with lagophthalmos, decreased vision, persistent red eye, and/or a facial skin patch in reaction should be referred by the general health worker to a higher level.

5. We recommend that visual acuity and lagophthalmos become the major indicators for monitoring disability and that corneal hypoaesthesia, corneal opacities, and uveitis (which will be recognised as one cause of a red eye) are removed from the leprosy disability grading scheme.

6. At the end of treatment patients must be educated regarding the risk of eye disease and informed that they should return for examination if they develop lagophthalmos, diminished vision, red eye, or a facial skin patch in reaction. Explicit instructions need to be given to each discharged patient as to where to go. Patients with lagophthalmos should continue to be followed up.

7. A training component that addresses the skills and activities of health workers in relation to care of eyes in leprosy should be introduced into national plans. Plans should address the needs at different levels and should include the needs of existing health workers through supplementary courses. Health workers currently in training should receive appropriate teaching through medical, nursing and paramedical curricula. In every setting with a leprosy control programme, a practical referral system needs to be clearly defined. All referral points (staff) need to be educated regarding the eye care needs of leprosy patients.

8. In settings where there are leprosy colonies/villages it is recommended that at least annual screening eye examinations and treatment are conducted. Furthermore, patients in 'care after cure' programmes

should have, as a minimum, annual eye care examinations and management.

9. Lagophthalmos surgery should be provided to patients who need it. Evaluation of the need for lagophthalmos surgery should be based on one or more of the following conditions:

- size of lid gap
- corneal exposure
- corneal hypoaesthesia
- visual acuity
- cosmetic appearance

There are a number of surgical procedures being used for lagophthalmos surgery. Research is needed to determine the best possible surgical procedures to correct the lagophthalmos and to improve functional and cosmetic outcomes of the surgery. Standardised routine monitoring of outcomes of lagophthalmos surgery is recommended. There are many barriers that prevent patients from accepting lagophthalmos surgery which need to be clearly identified; programmes need to be developed to increase uptake of lagophthalmos surgery. Finally, ophthalmologists and other relevant surgeons need to be trained in good quality lagophthalmos surgery.

10. Research shows that cataract surgery with IOL implantation, even in patients with evidence of chronic uveitis, can provide a good quality outcome. IOL implantation, where available, should be promoted among leprosy patients who need cataract surgery. The outcomes of cataract surgical services need to be routinely monitored.

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