

Modified lateral tarsal strip for lagophthalmos in leprosy patients.

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Introduction

- Potentially Blinding Lesions are mainly :
 - Lagophthalmos.
 - Cataract.
 - Corneal problems.
- About 5% of multibacillary and 2% of paucibacillary patients have lagophthalmos
- 290,000 worldwide.

- Prevention is the best method for control.
- This can be achieved by :
 - Anti-leprosy (MDT) therapy.
 - Early & proper steroid treatment of reactions and facial patches.
- Surgery is the only method of managing lagophthalmos to avoid corneal damage.
- Which procedure?

The ideal procedure

- Effective
- Technically simple : ophthalmic assistants
- One stage : no physiotherapy, no additional surgery.
- Inexpensive to perform (terms of supplies & time)
- Good cosmesis

The ideal procedure is **not available**

- Several procedures are in practice :
 - Tarsorrhaphy
 - Temporalis transfer
 - Horizontal lid shortening (LTS)
 - Lid suspension / loading
- Advantages & disadvantages of each well-documented

Systematic approach to lagophthalmos surgical delivery (experience from Egypt)

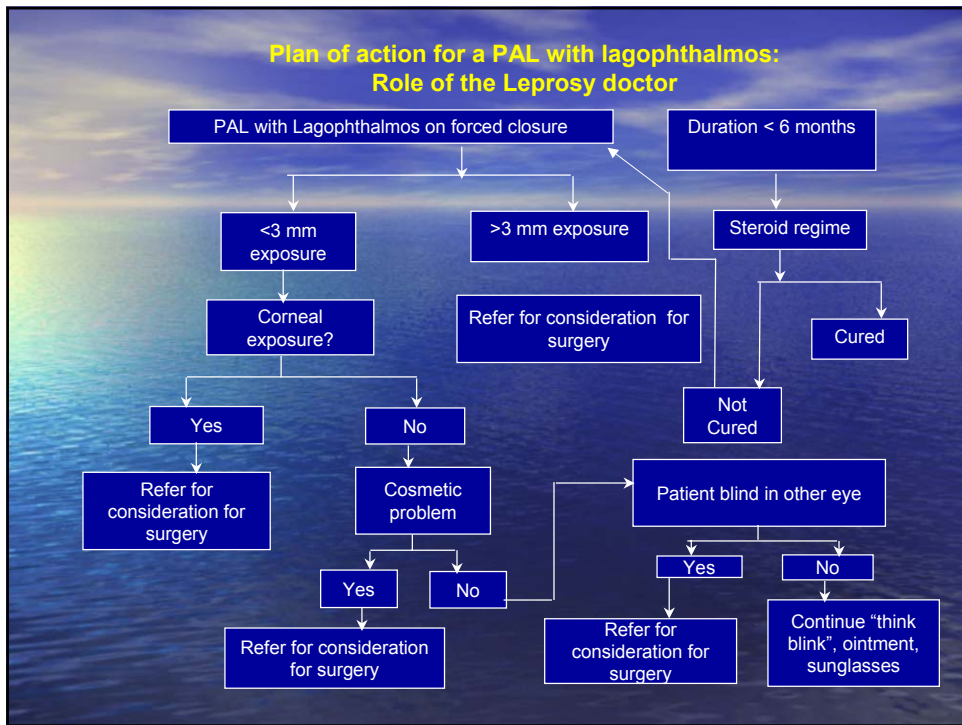
- Partners:
 - Leprosy Control Department, Ministry of Health.
 - Caritas
 - Al Noor Foundation
 - Kilimanjaro Centre for Community Ophthalmology

1st stage

- Health Education and Training of:
 - Leprosy Doctors (47).
 - Leprosy Nurses (54).
 - Leprosy Social Workers (20).
- Several sessions,
- Covering 25 governorates (over 60 m population)
- Basic eye problems, basic eye care, referrals

1st stage

- About 4500 patients were examined.
- Data was collected regarding eye problems and leprosy condition and treatment.
- Data integrated with sheet at MOH.
- Data Analysis.



2nd Stage

- 2000-04.
 - Lagophthalmos surgery centre established
 - Nationwide coverage
 - Over 300 operations done so far.
- Modified lateral tarsal strip procedure was done in all patients either alone or in combination with lateral canthoplasty and / or medial canthopexy.
- The degree of lid closure was assessed pre- and post- operatively and compared.

Findings

- The procedure was simple with no major complications or prolonged rehabilitation period.
- Over 80% of patients achieved a reduction of the lid gap of 3 mm. or more.
- Complete closure was attained in 50%
- About 15% needed an adjunct procedure.

Findings

- The amount of closure achieved varied inversely with the period of lagophthalmos.
- Older age and not receiving steroids at the onset of lagophthalmos were risk factors for a less favourable outcome.

Advantages of Modified Tarsal Strip Procedure

- Simple procedure, rapid improvement.
- One stage in most cases, yet can be repeated.
- A lateral tarsorrhaphy can be done in addition.
- Corrects associated ectropion or entropion (beneficial in trachoma patients)
- Cost-effective (instruments, sutures, medications)
- Good cosmetic result

Disadvantages

- Less effective in most severe cases : gap > 4-5mm
- Less effective in long standing cases





Recommendations

- Develop training manual for modified tarsal strip procedure
- Discontinue use of tarsorrhaphy, except as emergency procedure
- Include training of modified tarsal strip procedure in ophthalmology residency training programme and ophthalmic clinical officer training programme