
RECONSTRUCTIVE SURGERY (RCS)

IN

LEPROSY

RECONSTRUCTIVE SURGERY: Aim

- Restore function and form as far as possible
- Prevent further disability
- Prevention of disability and rehabilitation process.

Note:

Not all patients are suitable.

The reconstructive possible for:

lagophthalmos

Foot-drop

Ulnar/median paralysis (fingers and thumb)

Collapsed nose

Precaution: Successful outcome depends on

- Pre and post-operative physiotherapy
 - Ability of PALs to learn to use new ability
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Criteria for referral for RCS

The criteria have been grouped into three categories:

- Social and motivation
- Physical
- Leprosy treatment

The patients and the health workers should be involved in the decision to refer.

Social and motivational criteria:

- All patients who will benefit socially, occupationally or economically should be considered.
 - It should have the potential to make a difference to patients' acceptance in their society and their family and to improve their socio-economic situation.
 - Patients must be well motivated and have demonstrated that they can be responsible for their own health and follow instructions on treatment and care of their eyes, hands, and feet before surgery.
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- Patients who are not well motivated in self-care are not likely to be willing to participate in essential pre and postoperative physiotherapy.
 - Financial support or compensation for loss of income and travel
 - The surgery involves loss of economic activity for a period of several months.
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Physical criteria:

- Age: 15 - 45 years
- Duration of muscle paralysis - at least one year and preferably not longer than 3 years.
- Suppleness of the joints: More useful criterion.

Severe contractures or stiff joints are not suitable, although physiotherapy or surgery can reverse some contractures.

No **infection of the skin** such as scabies, and no deep cracks, wounds or ulcers at time of referral.

Leprosy treatment criteria

- Completed the scheduled course of MDT or at least for 6 months
 - Free from reactions and symptomatic neuritis for at least 6 months.
 - Should not have had lepra reaction during the past 6 months unless the surgery is for neuritis.
 - No tenderness of any major nerve trunk in the limbs.
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Conditions that require surgical intervention:

(i) Irreversible claw hand: ulnar / median paralysis

(ii) Foot drop: Lateral popliteal nerve

(iii) Claw toes: Posterior tibial nerve

(iv) Lagophthalmos Facial nerve.

criteria for fitness: Irrespective of age
Lid gap (>6mm)

(v) Wrist drop: Radial nerve

Conditions that require surgical intervention:

- (vi) Recurrent wounds of hands and feet: sequestrum removal.
 - (vii) Chronic nerve pain and nerve abscesses:
 - (viii) Cataract – Cataract in one or both eyes with visual acuity < 6/60
 - (xi) Gynaecomastia (enlarged breast) in males
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Conditions that require surgical intervention:

Facial deformities requiring plastic surgery:

- (x) Madrosis: Graft from scalp or temporal artery island flap
 - (xi) Sagging of face/ mega lobule: destruction of elastic/ collagen fibres of dermis Preauricular or naso- labial face lift
 - (xii) Nasal deformity: Invasion and destruction of nasal tissue especially nasal septum
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Priorities for reconstructive surgery

Operations for **lagophthalmos** are usually considered as a high priority because of the possibility of secondary damage to the eye.

Feet are usually considered the next priority followed by hands, but this may depend on the needs of individual patients.

For most patients there is a period of a few years in which surgery is **most likely to be beneficial**.

It starts when the disease is stable (free of reactions and neuritis), MDT is established, and the muscle paralysis is not likely to progress or to recover.

Other surgical problems

- **Lagophthalmos** (Tarsorrhaphy)
 - Hot foot
 - Amputation (finger, toe, limb)
 - Skin flap for chronic ulcers
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General criteria of fitness for surgery:

- Ideal age: between 15 and 45 years
 - Duration of the deformity: > 6 months
 - New cases on treatment: At least 6 months of MDT course
 - No lepra-reaction/ neuritis/prednisolone treatment: with in last 6 months
 - NO foci of secondary infection
 - PAL Willing & astute: for re-education
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Result of RCS



THANK YOU
