

NATIONAL LEPROSY ERADICATION PROGRAMME

Guidelines for Facilitating Reconstructive Surgery in Leprosy

1. Background

Leprosy is known to be associated with involvement of nerves due to which deformity in hand, foot or eye occurs. Due to this leprosy affected persons become disabled. Leprosy Affected Persons (LAP) already cured but left with deformities of hand, foot or eye would require Reconstructive Surgery (RCS) for correction of their deformity, to improve their functional ability. Pre & post operative physiotherapy is essential for successful outcome of surgery and therefore an integral part of the RCS process.

Deformities are known to perpetuate stigma & discriminations, hence the priority to correct the deformities early is very significant. Reconstructive surgery aims to restore function and form as far as possible and also to prevent further disability. It also plays an important role in the rehabilitation process. Reconstructive surgery will help in regaining the status of the leprosy affected in public mind thereby reducing the stigma to the disease.

DPMR services are given special emphasis in 11th Five Year Plan. About 4000 deformed LAP are being operated every year. RCS services are to be facilitated & developed further to clear the backlog and to cope up with new deformed cases.

The proposed surgical procedure and its positive consequences should be balanced against the consequences of not doing surgery. This should be discussed with the patient. Methods of managing to live with the deformities without causing further damages to the affected parts should be explained to patients who do not want or are not suitable for surgery. Counseling and motivation of the LAP is also an important aspect under DPMR services, that need due attention. These guidelines are framed for the service providers to apprise them about the Secondary/Tertiary centres where RCS are conducted, and procedures to be adopted for facilitating RCS in these centres.

2. Institutions / Centres for Reconstructive Surgery

2.1 Government medical colleges and other institutions are involved in conducting RCS. The list of 20 such institutions providing RCS during the year 2007-08 is given at Annexure-I.

2.2 Leprosy institutions under the International Federation of Anti-leprosy Associations (ILEP) are conducting RCS since long. List of 32 functioning institutions as on 2007-08 is given at Annexure-II.

2.3 Institutions conducting RCS in leprosy should have following facilities –
Provision of beds / hospitalization
Adequate manpower- trained surgeon, anaesthetist, OT nurse, OT assistant and Physio-technician / physiotherapist

Operation theatre in order, with special instruments such as - Andersens tendon

tunneler, Facia lata stripper, Fritschis spring retractor, iris scissors, Mosquito right

angeled clamp, Adsons forceps, besides general instruments and suture material etc
Physiotherapy equipmentse.g.wax bath, Ele. muscle stimulator, ADL set and
appliances for exercises.

Plaster application facility.

Splints / prosthetic & orthotic fabrication facility.

Alternate power supply.

It is essential that all the institutions should have facility for post operative
physiotherapyservices which is crucial for achieving the maximum (post surgery)
functional ability. Such facility may be either available in house or in other nearby
institution such as DDRC or NGO institute.

The states may identify more such centres and equip these for RCS, keeping the
criteriagiven above in view. Names of such govt. Institutions conducting RCS
regularly may be sent tothe Central Leprosy Division for updating the list at Annexure
– I.

3. Activities of the Tertiary level Centers :An operational guidelines for the
Secondary/Tertiary level institutions has been issued toall concerned. In addition to
care of leprosy complications and physiotherapy care, these centerswill mainly
provide Reconstructive Surgery services for Medical Rehabilitation of the
deformedleprosy Affected Persons.

Thus, the main activities are –

RCS & other surgical interventions with pre &post operative care.

Treatment of severe reactions / neuritis

Treatment of complicated ulcers / wounds

Confirmation of Relapse and its differentiation from reaction

Experts opinion on diagnosis of leprosy in difficult cases and associated disease.

Training of surgeons in RCS

4. Steps for referral of LAP with disability requiring RCS

4.1 Preliminary screening of deformed cases for fitness for surgery is to be done by
medicalofficer at PHC and also by Dermatologist / Medical Specialist at district
hospital. Asindicated in operational guidelines on DPMR for primary level, all grade
– II cases arereferred to the District Hospital for further assessment.

4.2 These screened cases will be referred to the Secondary/Tertiary Institution by the District Hospital/District Nucleus by providing a referral slip, as given in the operational guidelines on DPMR for secondary level.

4.3 These referred cases are examined by the Surgeon & PT of the RCS unit. The operating surgeon finally selects cases to be operated. Soon after selection the surgeon gives instructions for pre operative preparations and date for admission / hospitalization.

4.4 After the operation and immediate post operative care the cases will be referred back to respective PHC / district for post operative care as suggested by surgeon.

4.5 The dates for subsequent visit to the Hospital for periodic assessment will be indicated by the surgeon in the referral slip.

Source of patient can be either voluntarily reporting direct or patient referred by Primary and Secondary care units of the districts allocated to the Institute. Sometimes direct Patient can be also from districts of neighboring states.

5. Coordination

Coordination between institutions involved in RCS services and health care system is essential for keeping departments like Social Welfare, Labour & Employment, NGOs working for rehabilitation of disabled and providing socio-economic rehabilitation services. All these institutions will work in close coordination with the District Leprosy unit of the district where it is located. Statewise, Names of the districts where the 32 NGO and 20 Govt. Medical College/Institutions providing RCS as of now, is given as Annexure – III. track on LAP for follow up services, to develop linkage with other

6. The State Implementation Committee for RCS and Rehabilitation Programme, The state implementation committee for RCS & rehabilitation programme consisting of the State Leprosy Officer, member nominated by Central Leprosy Division, State ILEP Coordinator, PMR Specialist/ Orthopedic Surgeon, Dermatologist, Plastic Surgeon, Ophthalmologist, Dean/Superintendent/ Principal of the Medical College, will facilitate and monitor the DPMR activities at the institution.

In the guidelines issued on 1st August 2006, the objectives of the committee were listed as. To look into the overall need for providing RCS and Medical Rehabilitation to the cured and current leprosy affected persons in the state.

To periodically review performance of the tertiary level institutions providing RCS, located in the state. To help in maintaining coordination amongst the different level of DPMR services so that free flow of patients for RCS are available.

To monitor activities of individual institution including record keeping and reporting.

7. Assistance to Leprosy Affected Person (LAP) undergoing major RCS

A core group formed by the Government to work out identification and involvement of PMR institution for RCS, suggested the following as major RCS operation and recommended for payment of some financial assistance to the Patients and to the Govt. institutions.

7.1 Major RCS under NLEP

Hand Claw correction of hand Opponensplasty thumb

Wrist drop correction

Stabilization procedures such as arthrosis

Tissue reconstruction procedures such as contracture release and flap cover.

Foot

Eye

Nose

Foot drop correction and Lagophthalmos

Reconstruction of claw toe correction.

Collapsed nose

Soft tissue reconstruction of the sole.

Stabilization procedures such as arthrodesis.

It is now decided that following assistance will be provided in connection with the above mentioned major RCS in Leprosy deformed Patients.

7.2 Incentive for RCS Patients

The NGO institutions conducting Reconstructive Surgery often express that leprosy affected persons with disability who are mostly poor, are often reluctant to go for surgery, which is otherwise provided free of cost, due to long duration stay in the hospital, inability to take the disabled leprosy patients to hospital by family members and stay with them in hospital for economic reasons. To overcome these constraints it is decided to pay an incentive amounting to Rs 5000/- (Rupees five thousand only) to leprosy affected persons belonging to Below Poverty Line (BPL) families for each major operation, undergone by them.

The incentive is to be paid to all patients from B.P.L. family, whether operated in a Government or NGO Institution. Along with the operation, success of the surgery also depends on post operative care including physiotherapy. It is therefore essential to review the operated cases regularly at least till 6 months after the operation. Therefore, disbursement of the incentive money is to be linked up with the follow-up visits of the case as indicated below:

After completion of surgery on release from hospital

Follow-up visit after one month (4-6 weeks) of operation – Rs.1000/-

Follow-up visit after 3rd month of operation

– Rs.3000/-

– Rs.1000/-

7.3 Cash Assistance for Government Institutions

A number of Medical Colleges/ PMR centers and district hospital have been upgraded with facilities for undertaking RCS recently. Some more centers may also join in the future.

Although these institutions will be conducting RCS in LAP free of cost, they need to incur additional expenditure for this activity. difficulty in managing the extra cost out of their regular budget, these institutions will be paid an

To help the Government Institutions to overcome the amount of Rs.5000/- (Rupees five thousand only) for each of the major RCS conducted by them. The amount shall be utilized for procurement of drugs, dressing materials, POP, splints and other items required for surgery. Remuneration for surgeon or physiotherapist will not be incurred out of this fund. NGO institutions and Govt. run leprosy institutions are not covered under this cash assistance.

7.4 Mode of Payment

District Leprosy Officer of the district in which the tertiary care institution is located (Annexure – III) will be responsible for disbursement of incentive money to the LAP undergoing surgery and to the Govt. institutions for conducting RCS. Mode of payment should be 'userfriendly'. To achieve this aim the District Leprosy Unit of the district where the institution is located has been identified as the nodal centre for making all payment to facilitate RCS. Occasionally, some states do arrange for RCS in other institutions, bringing in visiting surgeon from other places. Patient undergoing RCS in such camps and the Govt. Hospital organizing such services also will get the incentive for the LAP as well as for the Hospital. In such situation the local District Leprosy Unit will be authorized by the State Leprosy Society to make the payment as per rules as a Temporary Nodal Centre.

7.5 Fund Flow

7.5.1 The Nodal district leprosy officer will be authorized by the State to draw and keep an imprest account amounting to a decided limit based on likely payment to be made by the unit to LAP undergoing RCS every month. This will facilitate payment at short notice.

7.5.2 The institutions (Govt. & NGO) conducting RCS will have to send a monthly report to the District Leprosy Unit in their districts, indicating the names of Leprosy Affected Person with deformity registered in the institution during the month and listed for RCS during next month (Annexure – IV). Copy of this will also be sent to other districts from where the patient comes for their information and updating of record.

7.5.3. Once the RCS is over, the Nodal District Leprosy Unit is responsible for making payment to the LAP in time. The institution will issue a certificate in the name of each patient recommending release of initial incentive amount of Rs. 3000/- in the format Annexure – V. This certificate must reach the District unit at least 7 days prior to the expected date of release of the patient, so that payment can be made in time. The LAP will be paid by the District Leprosy Unit in the hospital before the date of release.

7.5.4 The patient will be advised to report for check up and physiotherapy after 4-6 weeks of operation. The institution will again send another certificate to the District leprosy unit in the format Annexure – VI recommending release of the 2nd installment of Rs. 1000.00 of incentive. Payment will be made by the DLU accordingly before the date of release.

7.5.5 The patient will again be advised to report for further review at the institution after 3 months. The institution will issue another certificate to the patient in the format given as Annexure – VII, recommending release of the last installment of Rs. 1000.00 as incentive. Payment will be made by the DLU accordingly, before the date of release.

7.5.6 Govt. Medical colleges and other institutions conducting major RCS (Annexure – III) will submit a Reimbursement claim to the District Leprosy Unit in which the institution is located in the attached claim form (Annexure – VIII). The DLU will draw the amount through a bill and make the payment at the prescribed rate. The payment will be for all patient irrespective of the district from where the patient comes. It is important that all the Secondary/Tertiary institutions identified for conducting RCS send the monthly report in format given at Annexure – IV, indicating cases registered and listed for RCS without fail, regularly, to enable the DLU to make payment promptly.

7.5.7 For camps as indicated above, the District Leprosy Officer of the district where the Govt. institution organizing the camp is located will be responsible for making the payments. The institutions will maintain the records and submit report in format at Annexure – IV as well as certificates in format at Annexure – V, VI, VII for the patients and reimbursement claim in format at Annexure – VIII.

8. Monitoring the quality of RCS services

The main objective of the RCS is to bring improvement in appearance (shape) as well as functional ability of the affected parts of the body. Success & quality of RCS will depend on proper selection of cases, counseling, clean surgery, post-operative physiotherapy and absence of postoperative complications, resulting into physical & functional improvement. The reconstructive surgery services under DPMR will be regularly monitored under the program, so that both quantity and quality of the activities can be ascertained routinely and action for any deficiency can be taken in time.

8.1 Records & report.

Each RCS institution will maintain a register of surgery undertaken and its follow-up. These institutions will send a monthly report on major RCS Surgery carried out at the Institution to the District Leprosy Officer of the district in which patient belongs to for their information and record. A copy of this report will be marked to the DLO of the district where the Institution is located.

As indicated in this guidelines, the hospital will send regular monthly report of LAP registered and listed for RCS to the district leprosy unit in format given as Annexure IV. Further the institution will utilize the Post Operative Assessment Form given as Annexure IX, for individual patients.

The institution will submit a quarterly report on RCS to the district leprosy unit in the format given as Annexure X.

8.2 Action at district leprosy units

The District Leprosy Officer will collect quarterly report from institution(s) conducting RCS and compile in prescribed format (Annexure XI) and then analyze the report at their level and then take remedial measure, if needed.

The District Leprosy Officer will send the compiled report to their State Leprosy Officer. The District Leprosy Officer will maintain links with primary, secondary and tertiary level institutions and with State Leprosy Unit and continue to keep liaison & coordinate.

8.4 Action at state leprosy unit

The quarterly report received from the District Leprosy Officer will be compiled on format (Annexure XII) by the State Leprosy Officer and analyze same for providing feedback to the respective District Leprosy Officer/ Institution for any remedial action, if required. The SLO will send compiled RCS follow up report on Annexure XII to the Central Leprosy Division, every quarter in March, June, September and December.

8.5 Action at CLD

At CLD, there will be analysis of state reports based on the cohort of cases operated in a quarter and their follow-up (after surgery) for six months to assess the quality of services. Feedback will be provided to States on quality of RCS services in different institutions, observed on cohort analysis

8.6 Quality indicator for RCS surgery:

The cohort analysis report will be utilized for working out the quality indicator for RCS surgery institution wise, at quarterly interval as, Proportion of Operated Cases with Improved Functional Ability. It can be calculated as:

$$\frac{\text{Number of cases with improved functional ability at 6 months after operation} \times 100}{\text{Number of cases operated upon during the cohort period}}$$

The State Leprosy Officer will keep these activities in their Annual Action Plan for approval of Government of India and release of funds in advance.

Annexure – I

The names of Government institutions performing Re-constructive Surgery (RCS) in leprosy affected persons