Current concepts -
Reconstructive Surgery in Leprosy

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Deformities in Leprosy

- Nerve lesion
- Tissue infiltration
Nerve Lesions – Indications for Surgery

Diagnostic Biopsy
Nerve Abscess
For sensory motor recovery

Ulnar Nerve release and longitudinal epineurotomy

Helps only
- within six months of onset of neuritis
- needs to be followed up with steroid therapy

Before

After 1 year
Median Nerve Release for Weakness in Thumb

Fortunately median nerve affection is seen less after MDT

Often patient comes too late and tendon transfer is required

Deformities of hand

- Claw hand
- Claw hand with Ape thumb
**Author’s technique of ‘lasso’ ......British J. Hand Surg. 1984**

- Incision 2 mm above distal crease
- Identify A1 pulley
- Incise distal end & hook FDS out
- Divide FDS & loop it round A1 pulley
- Suture FDS to itself
- The MP Joint tension must be between 70 to 90 degree flexion

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**Before**

- [Image of hand condition before treatment]

**After**

- [Image of hand condition after treatment]
One in two’ lasso with FDS ring finger ulnar slip used for little finger

One in four lasso ..... Atul Shah, British J. Hand Surg. 1984

Sustained result after 11 years
Active abduction and adduction – An advantage of one in four lasso

Opponensplasty combined with one in four lasso
TRAC operation (Transverse Arch Correction) by ulnar slip of FDS……Atul Shah, Int. Congress, 1985

Distraction technique for release of stiff PIP joint

At least some action of the extensor expansion is necessary, Post-op finger loop splint and gutter splint is must
When fingers show the springing back action on passive extension, there is tendon contracture.

Deep fascia excised
Thick fascial attachment incised to weaken long flexors
Inability to extend fingers & wrist
Release obtained

If you can extend the fingers with minimum pressure, the result will be good.
Deformities of feet

Foot drop
Plantar Ulcer
Claw toes

Foot drop correction.....
standard subcutaneous route
FDB Myocutaneous flap…….Atul Shah, Ind. J Lep. 1985

Simple transposition flaps are more than adequate

Sub-cutaneous pedicle neurovascular island flap

Based on dorsal vessel and its branches

Result after 3 months
Neurovascular island flap.....Atul Shah, 1988
Provides sensate skin supplied by lateral popliteal nerve from the dorsum, NCV and H reflex confirms sensations,
Low recurrence of MTH ulcers

Plantar Graft
Plantar Graft

Deformities of face

Lagophthalmos
Loss of eyebrows
Depressed Nose
Sagging of facial skin
Temporalis sling for correction of lagophthalmos

Reconstruction of face enhances the self esteem, changes the personality, and increase acceptance in the society
Traditional face lift for wrinkles following leprosy affection

Current Approach:

Camp and Workshop Approach
Novartis CLC Association Experience of DPMR – In two camps more than 200 patients examined and 40 demonstration operations done. 35 surgeons trained for RCS, Pre and post op care, splint crutches, POPs, self-care kit etc. Economic rehabilitation of these patients adds value and bring about a positive change in a disabled persons life.

The RCS under DPMR plan of the GoI
Involvement of District Health Hospitals in RCS needs to be promoted further under DPMR
Defray travel cost and loss of wages to a substantial extent like INR 5000 per major procedure to be paid to patient – Under consideration.
DPMR Camp patients

Results
In Conclusion

- Simple and effective techniques of reconstructive surgery in leprosy are available
- Early identification and surgery on nerve helps to prevent deformity occurring.
- It is possible to reach the services by DPMR plan of GoI.
- Every good result makes a qualitative difference in the life of the leprosy disabled person.

Thank you