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GUIDELINES FOR IDENTIFYING PATIENTS FOR REFERRAL SURGERY

These guidelines are designed for programme managers as a framework for training their staff in identifying individual patients affected by leprosy, who would benefit from reconstructive surgery or other forms of surgery. It is important that centres doing reconstructive surgery in leprosy liaise with field workers in developing local criteria and arrangements for the referral of appropriate patients.

1 RECONSTRUCTIVE SURGERY

Reconstructive surgery aims to restore function and form as far as possible and to prevent further disability. It also plays an important role in the prevention of disability and rehabilitation process. Some patients can benefit from reconstructive surgery but not all patients are suitable. It is important that field workers are aware of the criteria for referring patients for reconstructive surgery so that suitable patients are referred at the right time and that those not suitable are not referred. The reconstructive procedures considered here are tendon transfer procedures such temporalis transfers for lagophthalmos, foot-drop corrections, and corrections for paralysed fingers and thumb. Pre and post-operative physiotherapy is essential for a successful outcome of surgery and needs to be arranged in consultation with the surgical centre.

2 CRITERIA FOR REFERRAL FOR RECONSTRUCTIVE SURGERY

The detailed criteria will vary between reconstructive surgeons and it is important that surgeons make field workers aware of their local policy for referring people. The criteria have been grouped into three categories: social and motivation, physical, and the leprosy treatment criteria. The patients and the health workers should be involved in the decision to refer.

2.1 Social and motivational criteria

- All patients who will benefit socially, occupationally or economically should be considered. The surgery 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. 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 may need to be considered for patients who may have dependent families. The surgery may involve loss of economic activity for a period of several months. Patients who are the main breadwinner in a household may be unable to undergo surgery unless assistance is provided.

2.2 Physical criteria

- The best age for referral for tendon transfer is between 15 - 45 years, but patients younger than 15 years or older than 45 years may be operated on depending upon the particular circumstance.
- The muscle paralysis should be present for at least one year and preferably not longer that 3 years. There may be exceptional cases where there has been muscle paralysis for longer than 3 years and the individual has kept the joints supple through passive exercises. The patient may not remember accurately how long muscle paralysis has been present, so suppleness of the joints may be a more useful criterion.

- Patients with severe contractures or stiff joints are not suitable, although physiotherapy or surgery can reverse some contractures.
- There should be no infection of the skin such as scabies, and no deep cracks, wounds or ulcers at time of referral.

2.3 Leprosy treatment criteria

- Patients should have completed the scheduled course of MDT or at least a minimum of 6 months MDT.
- Patients should be free from reactions and symptomatic neuritis for at least 6 months.
- Patients should not have taken steroids during the past 6 months unless the surgery is for neuritis.
- There should be no tenderness of any major nerve trunk in the limbs.

3 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. This 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. Field workers should be aware of the criteria for selecting patients to refer and the optimal timing of referral. Motivation is a key factor as patients may need to be in hospital for at least 6 weeks and will have to work at physiotherapy. Patients in whom surgery will make a difference should be considered for referral.

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 and the decision whether to undergo surgery should be taken by 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.

4 OTHER SURGICAL PROBLEMS

4.1 Lagophthalmos

This is a sight-threatening condition because of the risk of recurrent conjunctivitis and corneal damage. Patients, irrespective of age, who have a lagophthalmos with lid gap, particularly when there is loss of corneal sensation, should be referred for surgery. Patients with lagophthalmos but not fitting the criteria for reconstructive surgery can be considered for simple procedures such as tarsorrhaphy, which can be performed even on an outpatient basis.

4.2 Recurrent wounds of hands and feet

Patients who have recurrent wounds of the hand or foot should be referred for surgical advice. Such patients may have sequestra (dead bone) in the hand or foot which require removal. Such procedures can be undertaken in general hospitals and an X-ray of the affected part can help confirm the diagnosis. Sometimes in severe cases of recurrent wounds, amputation is the only solution – this should only be considered as a last resort.

4.3 Chronic nerve pain and nerve abscesses

Patients who have chronic pain and swelling in peripheral nerves which does not respond to analgesics and a course of steroids should be referred for consideration of nerve decompression.

Reading list

Srinivasan H, Palande DD, *Leprosy Surgery for General Hospitals*, World Health Organisation, 1997.

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Duerksen and Virmond, *Cirurgia reparadira e reabilitação em Hanseníase*, American Leprosy Mission International, 1997.

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