

1. Massage and physical education, that is, systematic, well-directed efforts on the part of the patient to remedy the disability.

2. Mechanical aids.

3. Direct operative measures:

(a) Tendon transposition, tendon lengthening, shortening and grafting.

(b) Arthrodesis.

(c) Nerve transposition and nerve grafting.

(d) Removal of skin flaps to aid in flexion.

1. As soon as the acute symptoms have passed, massage intelligently directed accompanied by manipulations designed to stretch the muscle groups tending to become unduly shortened, is helpful, and may be carried out by the mother or nurse. These efforts should be long continued and assiduously employed, and are helpful in bringing more blood to the needy muscles, thus lessening harmful contractures.

2. Mechanical aids are very varied and must be designed and used to meet the direct needs of each individual patient. Such braces employed while the patient is in bed at night are often most efficacious. The relaxed condition during sleep, the weight of the bed-clothes carrying the foot into a wrong position, continuing for so many hours, are responsible in a large degree for many of the deformities. A brace may be adapted to the needs of the patient, and correctly designed boots may accomplish the same in the daytime. The mechanical aids may have in view supplementing a short limb, maintaining the foot or leg directly under the body weight, fixing securely a disabled joint, holding the spine erect, or other purpose as indicated by the exact nature of the disability. In extreme cases crutches may have to be employed, but the resources of modern surgical art are such that probably no individual, however crippled by this disease, may not be rendered capable of voluntary motion.

3. Operative measures:

(a) Operations upon tendons. Nicoladoni in Italy proposed and carried out the plan of grafting energized tendons into others whose muscle had been rendered inert through paralysis. The principle of treatment thus advocated was sound, and its application has been greatly extended in the intervening years. Very briefly the object to be gained may be stated thus: In the unbalanced state of a joint the muscles not paralyzed do harm by causing deformity, hence if their action can be transferred so as to make their pull at another part where muscular traction is needed, such a transfer will help to restore balance, and consequently joint efficiency. The practice is now being employed very extensively and with such beneficial results as to entitle it to be considered a truly epoch-making advance. Its applicability is so