

Value of Physiotherapy in Deformities Associated with Leprosy.

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The early recognition of deformities of the extremities is of primary importance. Atrophies, contractions and bone lesions will eventually produce distressing and crippling deformities, and unless such are anticipated, correction and even arrestment is often difficult.

Physiotherapy, as carried out at The National Leprosarium at Carville, Louisiana, has produced very satisfactory results in many patients, and among those who have faithfully taken treatment there are very few who have not been improved.

Contrast baths have proved most valuable; these given in connection with massage and exercises have produced gratifying results in contractions, atrophies and anæsthetic hands and fingers. Ultra-violet radiations are especially useful in leg ulcers; callosities and perforating ulcers; infections about the hands and feet are also benefited by short exposures. Indurated areas respond more readily to radiant light applications, and this followed by massage is often helpful.

The Infra Red Ray has proved more valuable in nerve pains than any other treatment so far, and patients generally prefer it to either ultra-violet or the radiant light exposures. Improvement is often experienced after the first application, and many cases have been completely relieved after ten treatments, though others require many more and some experience little or no benefit. Low grade cellulitis is more resistant than any other complication, and various combinations to relieve this condition have been tried out thoroughly; so far, contrast baths, radiant light, followed by massage, have produced the more satisfactory results, though at best these can hardly be classed as satisfactory.

Diathermy has not produced the results looked and hoped for from its application though, in certain cases, nerve pains have been relieved by its use when other measures have failed completely. Rarefying osteitis and necrosis of the hands and feet have been arrested by the use of diathermy, but care must be used in anæsthetic areas or serious burns may result.

As a general rule, cases of the nerve type respond more readily to physiotherapy than do the tubercular or mixed types. Some mixed type cases develop acute tubercles after one or two visits to the physiotherapy department, and, in these, treatments have to be suspended; this is unfortunate, as before the tubercles subside what benefit was gained is often greatly diminished.

Anæsthetic areas, especially in the hands and feet, with marked atrophies and contractions, respond well to contrast baths, massage and radiant light, and if active and passive exercises are used, the results are gratifying; many such cases have regained normal sensation and motion; others of a more advanced type have improved enough to distinguish between heat and cold, though response to pain is diminished.

Anæsthetic areas on the extremities have been reduced by applications of ultra-violet rays and, in some, normal sensation has returned. Treatments should be given daily, at least six times a week, and patients encouraged to take their exercises in their rooms morning and evening, independent of those given in the department. Many of the contractions could be greatly benefited and the duration of treatment reduced by the application of corrective splints at night; this, however, is almost impossible because of the fact that patients have, in many respects, to care for themselves, and the large number having contractions makes the use of splints impractical.

Active and passive motion machines of the Zander type are very useful in overcoming moderate contractions of the hands and fingers and developing muscle power; these can be easily adjusted to the requirements of each individual case, and exercises given with them should be pushed to a point just short of muscle fatigue.