

Prognosis in Leprosy.

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ONE so often hears varying and contradictory statements with regard to the ultimate outlook in treatment, that it may be of value to sum up the present position. The prognosis or ultimate end of leprosy has to be viewed from a slightly different standpoint than is the case in many other diseases. The disfigurement that the disease produces in the later stages, the deformities that so often result, and the social stigma attached to the leper, all make it of utmost importance that something more than a mere eradication of the disease should be the aim. If the "cure" results in mutilation and physical deformity, the position of the patient socially is in no way changed, and he cannot in most cases resume normal life. Therefore the object of all treatment is to render the patient free from all signs of active disease, and of the stigma which so often accompany the arrest of leprosy.

The late Dr. Hansen summed up the situation for the leper in his day most vividly in his book "Clinical and Pathological Aspects of Leprosy" when he said: "Lepers usually die before the disease has run its course. But in the maculo-anæsthetic (nerve) form the cure of leprosy is very different. We have occasionally a complete subject with vigour and good health, but usually only a miserable rudiment of a human being, with more or less paralysed and deformed hands and feet with unclosable eyes, of which part of the cornea is opaque, and from which tears run down over the cheeks, and with paralysed facial muscles unable to close the mouth, so that saliva constantly dribbles from it. Such cases, may, however live long, and reach great ages, if under such circumstances this can be looked upon as any advantage." . . . "In nodular leprosy, the bacilli in the leprous products break up into granules which finally disappear, and there remains of the leprous product only a scar in which nothing leprous can be recognised. Occasionally a widespread anæsthesia, the result of nerve affections; and in the maculo-anæsthetic form this is the regular termination of the disease. In both cases the leprosy is completely healed."

To-day, however, the chances of completely healing the leper without permanent deformity are much greater. It is, however, unreliable to attempt to give percentages of the probable number of lepers who become "apparently

cured," as the ultimate outlook depends largely on the stage of the disease in the patient when he presents himself for treatment, and therefore, when referring to prognosis in leprosy it is convenient to describe three stages :—

- 1.—The early stage when the body has acquired no resistance to the invading organism.
- 2.—Stage of commencing resistance. When the body shows signs of reacting to the invading bacilli.
- 3.—Stage of subsidence of the disease.

1. *The Early Stage.*—This stage is seen in those cases who show signs of the disease in the form of a few hypopigmented patches or a slight loss of superficial sensation. The great majority of patients, if efficiently treated, should ultimately become symptom free. It is during this stage, which may continue on into the skin type without signs that the body is beginning to react to the enemy within, that treatment must be carried on with care. Any severe reaction, however caused, is liable to break down isolated bacillary foci, and thus lead to a general dissemination of the disease.

2. *Stage of Commencing Resistance.*—In this stage, the patient, who is generally a skin case, has had a series of reactions during the course of the disease, and the body has acquired a relative immunity and is able to destroy any bacilli which may be liberated into the circulation. Therefore, any treatment which will produce a reaction will tend to benefit the patient. In consequence it is just in this stage that the efficiency of any remedy is difficult to determine, for any treatment which will produce a reaction, *e.g.*, protein shock therapy, etc., will tend to benefit all patients who are in this stage. It must be remembered that reaction although tending to be beneficial during this stage, must be carefully controlled. Prolonged reactions weaken the patient, and therefore lower his resistance, and so would again lead to a greater dissemination of the disease. A sharp attack of lepra-fever, lasting for 24 to 48 hours, not leaving the patient exhausted, will do no harm, and frequently gives the body defences just a sufficient stimulus to cause them to overcome the invading host. If the patient has a severe form of leprosy, especially the nodular variety, the disease will take many months before it becomes arrested, and it is during the process of arrest that secondary deformities and paralysis are liable to occur, and therefore the stigmata of leprosy will ever be apparent. Although the prognosis in this stage of the disease must of necessity be guarded,

yet one can hope for a favourable result in a large number of cases.

3. *Stage of Subsidence of the Disease.*—In this stage leprosy gradually dies out of the body, and as the body overcomes the disease, nerve and other tissues are destroyed by the contracting fibrous tissue, leaving the patient healed of his leprosy, but mutilated beyond hope of recovery. Treatment will hasten this result, but cannot prevent damage already done, and therefore all the cases in this stage of the disease, if they do not die of some intercurrent infection, will, as a rule, become arrested with residual mutilation and deformities, treatment only alleviating their sufferings and hastening the process of natural arrest of the disease.

The prognosis in leprosy for those under treatment, therefore, needs careful thought, for it is different in the various stages of the disease. In skin leprosy, especially of the severe type, the prognosis should be guarded, for while the lesions are responding under treatment, secondary reactions may be taking place which will leave the patient scarred. Naturally the longer the patient has had leprosy the greater the likelihood that gross deformity will set in. While the position to-day is very much more promising, yet one must ever keep in mind the fact that leprosy is one of the most deceptive diseases the practitioner is called upon to deal with, and therefore, he should not make the mistake of being over optimistic ; but on the other hand, if there are no grounds for it, he should not be too pessimistic, because the keeping up of the morale of the patient is an important factor in combating the disease. The attitude therefore should be one of a reasoned optimism.