LECTURE ON LEPROSY.

DELIVERED TO THE BRITISH COLLEGE OF NURSES

By Dr. R. G. Cochrane, M.B., M.D., M.R.C.P., M.R.C.S.

The subject of leprosy is assuming a greater importance in the field of medicine. It affords me pleasure to come and speak to you on this topic especially as the nursing profession has and will have increasing interest in leprosy and its treatment.

Leprosy occurs or has occurred in almost every country in the world, but in the more civilised European countries the disease has died out. In the Middle Ages in England leprosy must have been fairly common, and some of the best known hospitals started as institutions for the care of sufferers from leprosy. There are to-day some fifty imported cases in England, but the existing conditions in this country are inimical to the spread of the disease. The first point I should like to make then is that in well-developed communities leprosy apparently will not extend. Secondly, there is a good deal of evidence that the most primitive aboriginal people do not suffer from leprosy unless the disease had been introduced from without. Two examples will suffice: the Ainu of Japan, and the Negritos of the Philippine Islands. It must, therefore, be concluded that leprosy flourishes best in those countries which are becoming industrialised, for this involves the breaking up of the primitive seclusion, the opening up of roads and the crowding together of people in unhygienic surroundings. In such countries then as India, and China and certain parts of Africa, leprosy is found to be very prevalent. Even though leprosy is very common in certain countries, the distribution of the disease is always found to be patchy. Certain conditions, then, seem to determine the incidence of leprosy, all these are not known, and only future investigation in the field can determine them. Of the factors that are known, the following are the most important :—

(1) Diet.
(2) Climate.
(3) Race
(4) Social conditions.

Diet.—The importance of this in the etiology of leprosy is being increasingly stressed. The most interesting examples of the effect of diet are seen in India and Africa. Leprosy is very prevalent in South and Central India, but as one goes further north one finds, for example, that in the Punjab the incidence is much lower, and it is interesting to note that in South and Central India and wherever leprosy is prevalent the people are largely rice eating, whereas in North India the people are grain eating. In Africa the areas of highest incidence of leprosy are often those in which the staple food is carbohydrate (Cassava—a variety of tapioca root).

Climate plays a part in the etiology of leprosy and it appears that in the more moist countries the incidence is much higher. Undoubtedly in such areas skin infections and abrasions are more often seen and the constant moist atmosphere one would imagine serves as a good medium for the growth of the bacillus.

Race.—How far there is a racial resistance to leprosy it is difficult to say, but it is an undoubted fact that where leprosy is introduced into a virgin soil the more severe appears to be the form of the disease. This is well illustrated in Central Africa where certain areas, *e.g.*, parts of Uganda and the Sudan the disease seems to be spreading more rapidly than in others, and it is just the former places where the percentage of infective cases is high.

Social Conditions.—Unsatisfactory social conditions, overcrowding, bad housing, chronic diseases, etc., all lower the resistance of a community and tend to maintain a high incidence of leprosy.

It has been said that the incubation period of the disease is on an average about three to five years, but as in tuberculosis, so in leprosy, the disease may be latent and only declare itself if conditions in the body are favourable to its spread. This may explain the occasional occurrence of a case developing as long as twenty or more years after known exposure to infection.

Diagnosis.

It is very important for the nurse to be acquainted with the elements of diagnosis in leprosy, for frequently in the Tropics where there is no available qualified medical help, the nurse has to act as doctor, dispenser and general factotum. As has been stated, leprosy is a chronic disease and one of long duration, and, therefore, it may take many years for the disease to run its course. It should be remembered that an individual very seldom dies from leprosy, and if he does not succumb to tuberculosis or one of the other hundred and one complaints which complicate the disease he will ultimately overcome the infection, but Nature does so at the expense of the body and the individual ends up sans teeth, sans eyes, sans taste, sans everything.

Before, then, the question of treatment can be considered, it might be well briefly to describe the main points in the diagnosis of leprosy. It is universally recognised that leprosy is a generalised disease and that local signs do not mean that the malady is confined to that place with visible disturbances in function, but before any definite signs are forthcoming the micro-bacterium lepræ may have become disseminated throughout the body. Although leprosy is not generally a local disease, yet its particular manifestations select so clearly two types of tissue, viz. nerve and skin, that its classification is based on this property. Therefore the disease is said to be neural or cutaneous, depending on whether the signs discernible are seen in nerve or skin tissue. It must be remembered while there are cases with apparently only nerve involvement, practically all cases of skin involvement, show nerve affection as well. As a general statement, it may be said that the higher the resistance a race or individual has, the greater the possibility of the predominance of the nerve over the skin type. Further, unless a neural case has a positive nasal discharge it is not infective and can be allowed freedom of movement.

The signs of early nerve involvement are four :—

(1) Hypopigmentation.
(2) Anæsthesia.
(3) Nerve enlargement.
(4) Muscular paralysis.

Details of the diagnosis of neural leprosy have been described elsewhere.

The signs of skin or cutaneous infection are as follows :—

(1) Raised red rashes.
(2) Infiltrations.
(3) Nodules.

It may be said that in a country where leprosy is prevalent any raised rashes which do not itch should be suspected until proved not to be leprosy. Few cases are missed if the disease is borne in mind. The diagnosis of skin leprosy is confirmed by cutting out a piece of the effected rash with a pair of scissors, curved on the flat, expressing the cellular elements on a slide and fixing and staining as for the tubercle bacillus.

Treatment.

Leprosy being a chronic disease and one of long duration, the success of one's treatment depends on the maintenance of the patient's general health, and unless measures to combat predisposing diseases, to raise bodily resistance by such means as the adjustment of patients' diet both the quality and quantity, exercise, fresh air, etc., there is little likelihood of special treatment being successful.

As regards special drugs, any of the hydnocarpus preparations (Chaulmoogra), pure oil, esters or sodium hydnocarpate, the form most commonly used is "Alepol," are

previous page next page