Prophylactic Therapy Against Leprosy

Ideas as to how leprosy can best be combated have changed tremendously since earlier times. Leprosy is not as contagious as was once generally supposed; in fact, the disease does not spread very easily. It is certainly less infectious than tuberculosis, for example, and therefore does not call for particularly draconic measures in the social sphere. For this reason, patients suffering from leprosy should nowadays not be subjected to severer restrictions than those imposed on persons with tuberculosis.

An improvement in hygienic conditions and in the general standard of living is in itself sufficient to reduce the incidence of leprosy. Hansen himself once said that "Soap is the best protection against Leprosy". Davey, Ross, and Nicholson point out in this connection that conditions as regards leprosy have considerably improved in Eastern Nigeria. Among the reasons suggested for this are a natural decline in the prevalence of the disease, better hygiene, a well-organised system of leprosy control, as well as the spread of tuberculosis.

Compulsory segregation was once considered to be the only reliable protective measure. Today more and more authorities are tending to take the view that isolation or hospitalisation is necessary only in contagious or 'open' cases with smears showing a high concentration of bacilli (Dubois, Laviron, Richet, DriCot, Swerts). At the 7th International Congress of Leprology held in Tokyo from 12th to 19th November 1958, Estrada reported that compulsory segregation has now been completely abolished in Mexico. In future, it will be chiefly the duty of special ambulatoria or clinics to supervise and treat patients with leprosy. These institutions will be in a position to recognise fresh cases of the disease, to examine them, and to assess the prognosis. Various speakers at the Tokyo Congress suggested in addition that for psychological reasons the term 'leprosarium' should be abandoned in favour of 'ambulatorium' or 'centre for the treatment of skin diseases'. It was also argued that all coercion of patients should be abolished and that their individual liberty should be respected (Barba Rubio and Perez Suarez). Patients should likewise no longer be referred to as 'lepers' (Estrada). At the same Congress, Salazar Leite stated that therapy for leprosy on an ambulant basis had become very popular in Portuguese territories overseas and that patients reported regularly for treatment. He added that mobile ambulatoria had yielded better results than stationary clinics. Similar experiences were reported by Pinto.

Particular importance should be attached to the care of children. Since young people living together with diseased persons are particularly exposed to danger, it has been suggested that the children of parents with leprosy should be transferred to other families or to homes, etc. as soon after birth as possible. But this will obviously not always be easy to realise in practice. In a report by the Philippine

Ministry of Health on the Culion Sanatorium, which has 50 years' experience behind it, it is recommended that as a general rule children should not be separated from their parents before the age of 2; otherwise, a considerable increase in the infant mortality rate would occur. On the other hand, it must be borne in mind that 50% of all children separated from their parents when only 6 months old developed leprosy by the age of 5.

One of the prophylactic measures adopted in recent years consists of vaccination with B.C.G., the reason being as follows: tuberculosis and leprosy are both infectious diseases displaying many similar features. Prior to the discovery of Hansen's bacillus, it was sometimes even argued more or less openly that the two diseases were identical.

Today there is no longer any doubt that tuberculosis and leprosy are different entities, though they do bear certain resemblances. This has induced several authors—including Chaussinand, for example—to conduct experiments in an attempt to determine whether the two diseases are not to a certain extent antagonists. Thus, among fresh cases of tuberculosis and among persons who had recovered from tuberculosis as much as 25 years previously, no sign of leprosy could be found (Montestruc).

Thanks to B.C.G. vaccination it is often possible to bring about a decisive modification in the reactivity of the organism, with the result that cases showing a negative reaction to the lepromin test with positive bacteriological findings can be transformed into lepromin-positive reactors with, in some instances, negative bacteriological findings. Opinions on this subject differ, and a final verdict will probably be forthcoming only after many more years of patient and painstaking research. There seems, however, to be unanimous agreement that, where the risk of infection is exceptionally great, e.g. in children living among patients with the malignant form of leprosy, B.C.G. vaccination may well be of some use (Doull). But even if B.C.G. vaccination does possibly make children resistant to leprosy, the offspring of leprous patients should nevertheless live apart from their parents (Brett). The young organism probably displays only low resistance to the leprosy bacillus; incidentally, the same also applies to Koch's bacillus.

Just how divided opinions are as to the value of B.C.G. vaccination is born out by the proceedings at a seminar on the treatment of leprosy held in Belo Horizonte, Brazil, from 30th June to 7th July 1958; here, one group of workers contended that B.C.G. vaccination should not be abandoned, since it enhanced the body's natural defences against leprosy. By way of contrast, another group expressed the view that B.C.G. prophylaxis against leprosy was not justified. At the International Congress in Tokyo, too, differences of opinion emerged on this point. For example, Convit (Venezuela), reporting on 5 to 8 years' experience with B.C.G. vaccination, revealed that, whereas roughly 45% of a non-vaccinated group developed leprosy, only 5.6%

of the vaccinated cases contracted the disease. Moreover, the lepromatous form occurred in none of these latter instances. Similar findings were reported by Doull, who thought that the tuberculoid form was more likely to occur among patients vaccinated with B.C.G. Among 2,329 children vaccinated with B.C.G. vaccine, Chatterjee (India) found only 0.7% suffering from leprosy, as compared with 17% of the children not vaccinated. B.C.G. vaccination is recommended by Azulay (Brazil) as well as by Baccareda-Boy (Italy), who achieved complete protection against infection by this means. On the other hand, Bachelli (Brazil), suggested that one should allow more time to elapse before assessing the results of B.C.G. vaccination, and that the vaccination itself called for caution. Gay Prieto (W.H.O.) doubted whether B.C.G. vaccination had any prophylactic value at all. Recently, further vaccines have been developed, but the rsults so far achieved with them permit of no final conclusions.

Gay Prieto claims that, in addition to supervising persons exposed to the risk of contracting leprosy, chemoprophylaxis should also be developed. At the 6th International Congress of Leprology (1953), a committee recommended prophylactic treatment with sulphones for all persons ovr 10 years of age living in contact with infectious cases of leprosy or who still show a negative reaction to the lepromin test after vaccination with B.C.G. Ramon Miquel (Thailand(who gave prophylactic treatment with D.D.S. to 184 children in the leprosy village of Ban Noi, reports that over a period of 3 years not one of them has shown any sign of the disease. Prophylactic therapy should be continued for 6 months in the case of children in contact with non-lepromatous sufferers; those in contact with lepromatous cases should be given 12 months' treatment. The new anti-leprosy drug Ciba-1906 is also suitable for medicamentous prophylaxis; one of its outstanding advantages is that it is well tolerated not only by adults, but also by children.

(Note : Ciba-1906 is not available in India)

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