

EDITORIAL

As a result of the work of leprologists in many parts of the world, particularly Fernandez, de Souza Campos, Rotberg and Bechelli, followed by Chaussinand, Lowe and Dharmendra, to name but a few, a great deal of interest has been created in the possibility of giving protection from leprosy by means of B.C.G. vaccination. We, therefore, felt it was opportune to ask a well known worker in tuberculosis to give us a summary of his views on B.C.G. Vaccination and Immunity in Tuberculosis. In this number of the Review Dr. F. R. G. Heaf, Davies Professor of Tuberculosis in the University of Wales, has kindly contributed an article which will be of great value to workers in their studies of the relationship between B.C.G. Vaccination and the Lepromin Reaction.

There are several points of relevance in this article in connection with the question of the assumed protection of children against leprosy by the use of B.C.G. Vaccination. We would draw attention to certain statements of Prof. Heaf in order that leprosy workers may not be tempted to be over-optimistic in regard to the expression of their opinions in this matter. Prof. Heaf mentions that "we must not assume that vaccinated individuals can withstand large doses of virulent (tubercle) bacilli." This is consistent with Dr. Lowe's remarks in his article in the previous number of the Review, when he says "It should be made quite clear to everyone concerned that B.C.G. vaccination of those exposed to infection does not remove the necessity for taking every possible step to prevent or minimize contact between the open case of leprosy and healthy persons, particularly children." Wishful thinking may be a pleasant habit, but at least in leprosy it may retard rather than advance progress. We are reaching a stage in the campaign against leprosy when more certain victory is in sight, but let us remember that all these stimulating and heartening discoveries are merely skirmishes in this centuries-long conflict, and that the final clash with the enemy has still to be fought.

Some of the difficulties in evaluating the results of the tuberculin test in relation to B.C.G. described by Prof. Heaf are a timely reminder to those who contemplate embarking on this complicated investigation in leprosy, for they must be fully aware of all the possible errors when they come to assess their results. It cannot be too strongly emphasised, to use Prof. Heaf's phrase, that "the tuberculin test is a measure of skin sensitivity, and that it is quite

certain that tuberculin sensitivity and immunity are different entities, although there is a relationship between them." Let us therefore not too readily assume that B.C.G. vaccination gives immunity to leprosy, but go no further at present than Dr. Lowe does and conclude that it increases tissue sensitivity to the *M. leprae*, and therefore gives the defences of the body a better chance of overcoming the infection, or if leprosy develops, of showing the milder self-limiting form of the disease. We must, however, not forget that a person who is hypersensitive to lepromin, if he contracts leprosy, may become an active and gross major tuberculoid case, with all the possibility of serious residual deformity resulting from the excessive tissue reaction in the nerves. A markedly strong positive lepromin reaction may therefore be a mixed blessing. All these factors must be considered in any discussion with reference to the possible protection of B.C.G. vaccination in leprosy.

The story of Kuluva describes a most interesting co-operative effort between mission, Government and the African local administration, leading to what appears to be a successful experiment in the control of leprosy in part of Uganda. It is of interest to note that Dr. Williams favours the parenteral administration of the parent sulphone, and has devised a method of overcoming, not only the difficulty of making an aqueous suspension of D.D.S., but of reducing the time in giving injections to such a degree that he states, in justification of this method, that "by attention to technique a great deal of time otherwise spent in counting out and dispensing tablets could be saved." Certainly, at Kuluva, the organisation is such that it would be of interest if this method were given a wider trial. As yet the work appears not to have continued long enough for the assessment of bacteriological results, but we would consider the dosage of D.D.S. given to be on the low side. It might be of value if a comparison of the use of a suspension of D.D.S. were made with aqueous sulphetrone. The preparation of aqueous sulphetrone would be less time consuming, and would do away with what is after all a practical expedient, but we hardly think that this method would be altogether approved by our friends the pharmacists. We hazard the opinion that the equivalent of two grammes of sulphetrone, one gramme twice a week, would give as good results. We commend this article to the serious attention of those who may be of the opinion that the oral administration of Dapsone is not without its disadvantages.

An Evaluation of New Treatments, by Dr. W. S. Davidson reminds us of the care that has to be taken in assessing results. We

are interested in his claim of the apparent superiority of thiosemicarbazone, for we ourselves have come to the conclusion that this drug is not superior to the sulphones, and its daily administration and possible toxic side effects preclude it being used as the drug of choice in the therapy of leprosy. We look forward to further contributions from workers in Western Australia along these lines.

Dr. Mario Guadagnini's article on Lepromatous Nerve Lesions emphasises once again the importance of measures to prevent deformity arising in leprosy. This article stresses the need for operative interference at the appropriate time and, read in relation to Mr. Brand's work in S. India, will add further to our knowledge of the causation of these lesions. We have never been able to persuade ourselves that it is sound surgical practice to transpose the ulnar nerve in front of the internal condyle, for we feel that in such a position it is exposed to a greater degree of trauma, and that the simpler operation of resection of the sheath is as satisfactory. We will welcome views of workers who have had experience in these surgical procedures.

Sulphone Cilag is a monosubstituted sulphone, and as such is of considerable interest. The results of a limited experiment in treatment with this derivative are reported by Dr. K. Ramanujam, of Madras. His contribution will be read with interest. The general level of dose of the sulphones is much lower than originally thought, and this is no exception with this derivative. Sulphone Cilag is active as all sulphones appear to be, and therefore can be recommended for use, but it is hardly likely to replace the more economic parent sulphone or parenteral sulphetrone.

Dr. Corcos' article on the possible effect of sunlight on *M. leprae* will create considerable interest, and we look forward to his further investigations. The question of being able to decide as to whether a given smear of *M. leprae* contains live or dead bacilli is an important one, and any light on this matter is always welcome.