5. *Dr. R. Pepys of the Tuberculosis Research Unit, Medical Research Council, London, N.W.3, writes regarding depot lepromin as follows:*

"Modifications of local retention of the antigen, for example tuberculin, influence delayed type reactions (Pepys, 1955). Depot preparations in liquid paraffin/lanoline vehicles prolong the retention of the antigen, thereby enhancing its potency considerably, and also showing the development of hypersensitivity in negative reactors in response to BCG vaccination by the appearance of reactions at the previously negative test sites.

It is now possible to compare reactions to multiple puncture tests with a depot tuberculin (PPD) cream (Pepys and others, 1959) and with depot lepromin cream (Brown, 1958). With the depot PPD cream, very low degrees of sensitivity have been found in subjects who fail to react to Mantoux tests with 100 tuberculin units. On the other hand, although the lepromin in a depot preparation also appears to be more potent than aqueous lepromin in tuberculoid cases of leprosy, it did not, like the aqueous lepromin, give reactions in lepromatous cases. Prolonged retention of both the depot PPD cream (Pepys and others, 1958) and the depot lepromin cream (Brown and Stone, 1959) has been shown by the appearance of reactions at previously negative tests after BCG vaccination. The depot lepromin test conversion from negative to positive in healthy subjects after BCG vaccination confirms the antigenic relationship of these mycobacteria. Common polysaccharide components in chemical extracts of *M. leprae* and *M. tuberculosis* have been demonstrated serologically (Pepys and others, 1959 (*a*)).

The similarity of the findings with depot PPD and depot lepromin raises problems related to both tuberculosis and leprosy. Since it is known that persons with relatively weak tuberculin sensitivity, detected by 100 TU intracutaneously, have some natural antituberculous immunity (MRC 1959), it is desirable to determine

whether there is any similar immunity associated with the even lower degrees of tuberculin sensitivity demonstrated in many subjects by the depot PPD cream test. These subjects give accelerated reactions to BCG vaccination, but would in the ordinary way have been considered suitable for BCG vaccination because of their failure to react to Mantoux tests. These findings are important if BCG vaccination is to be studied for the prevention of leprosy, and suggest that depot PPD and depot lepromin should be employed together."

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