

## EDITORIAL

### INSECT TRANSMISSION OF LEPROSY

Dr. Moiser's paper on the transmission of leprosy infection by cockroaches suggests the implication of a new culprit. As far back as 1912 Leboeuf\*, after reviewing previous records and carrying out numerous experiments on insects studied the domestic fly is the insect most likely to convey the bacilli. It can absorb enormous quantities of Hansen's bacilli by feeding on leprous ulcers, and these can be recovered in large numbers from the excreta. He suggests that possibly the domestic fly plays an important part in conveying bacilli to the skin of others. "But in any case he does not believe it to be more than one mode of contagion rather than one of transmission in the proper sense. In fact everything in Caledonia [where his investigations were made] goes to prove that contagion is made directly from one patient to another, or to a limited extent by objects contaminated by the patient." Leboeuf's experiments also show that domestic flies cannot convey the disease to any great distance.

Regarding the 'oval bodies' mentioned in Dr. Moiser's paper, the editor has consulted Professor P. A. Buxton, F.R.S. who points out that a number of micro-organisms occur regularly in cockroaches and that, as these insects eat a great variety of types of food, they may be expected to swallow many types of bacteria. He feels that full consideration should be given to the possibility that some of the organisms are acid-fast; he also suggests that, as acid-fast bodies occur in a considerable proportion of Dr. Moiser's insects, it seems probable that they are normal inhabitants of these insects.

If, however, we discard the oval bodies the findings of acid-fast bacilli are of interest. It is well known by those who have worked in leprosia in India and other places where cockroaches are common that they bite the anaesthetic limbs of sleeping patients without their being aware of it. It is doubtful, however, if the same could occur in non-lepers. While cockroaches may be the means of carrying bacilli, it is difficult to accept the contention that bacilli are regularly carried to long distances by them, or at least that this can to any great extent account for the fact that 60.9% of patients are infected without being able to give a history of previous contact with another case. It is generally found that the number of cases without contact history diminishes in direct

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\* *Leprosy* 14, 119.

proportion to the time spent in following them up to their former residences and enquiring into their past history. We are grateful, however, to Dr. Moiser for introducing this subject and hope that others will continue his investigations. It is important also that the new insecticides, such as D.D.T. should be used in controlling the insect pests which so often infest leprosy institutions.