

## Reviews

"INTERNATIONAL JOURNAL OF LEPROSY." Vol. 1, No. 3. July, 1933.

Among the original articles in this issue there is one by Dr. Molesworth on "The Influence of Natural Selection on the Incidence of Leprosy," which is a development of a paper which was read before the Australasian Association for the Advancement of Science in Sydney in August, 1932, which was published in the *Acta Venereologica*, in August, 1932. Muir criticised the paper in the same Journal, and a reply by Molesworth to Muir's criticism appeared in *Leprosy in India*, in July, 1933. The present article is largely rewritten with a view to meeting Muir's further arguments. It is in itself an attractive theory, and while the existence of racial or tribal resistance cannot be disputed, whether this is due actually to the laws of natural selection or to the general resistance in the tribe being raised by economic conditions, or the disappearance of predisposing causes, such as famine and disease, etc., would be difficult to prove. It would be an injustice to the theory to attempt to detail Muir's arguments, and our readers are referred to the original communications if they wish to study the subject in more detail. Suffice it to say that countries such as Japan, where the factor of natural resistance should be beginning to come into play, there should be some evidence of the commencing disappearance of leprosy. On the contrary, however, leprosy apparently is still prevalent, and, furthermore, the non-resistant form, generally considered to be the advanced cutaneous form, is still very prevalent.

Dr. Chatterji contributes an article on "Thickened Nerves in Leprosy in Relation to Skin Lesions." This is an extremely interesting article and we reproduce Dr. Chatterji's summary and conclusion:—

"Observations have been made on thickened nerves in relation to skin lesions as seen in a clinical study of 3,079 cases of leprosy.

"The area of deep analgesia is usually less than that of superficial anæsthesia. As repair progresses, the anæsthesia usually persists longer than the analgesia.

"From the clinical findings it seems that in the ascending type of nerve lesion the infection spreads by lymphatics from the skin lesion. The reasons why the nerves are found thickened in their superficial course, like the ulnar behind the elbow, are that there is space for the nerve to swell, and that because the lymphatics and blood vessels of the part are not under the pressure of muscles, stagnation may occur and therefore the infection finds time to work out its course. This also explains aberrant findings in which infection may spread by collateral branches of lymphatics to the nerves adjacent to the skin lesion.

"The nerve supplying the leprosy patch should be palpated, as far as practicable, throughout its whole course because only a particular part may be affected, though the whole trunk may be involved. The adjacent nerves should also be examined for any aberrant findings.

"Sometimes a case of leprosy with thickened nerves may serve as a living model for the anatomists; even the finer nerve branches of a nerve may be so thickened that their course can be demonstrated easily by palpation. On the other hand, a nerve may be missed entirely because it has an abnormal course, as when the ulnar is found on the medial epicondyle.

“The importance of the nerve findings in relation to diagnosis, prognosis and treatment is emphasised. If the wide possibilities of cutaneous nerve involvement are kept in mind the *diagnosis* of an early case of leprosy is often facilitated, especially when superficial anæsthesia is not marked, or when the affected part is burned or disfigured by a local corrosive application.

Dr. Read, of the Henry Lester Institute of Medical Research, Shanghai, contributes an article on “The Toxicity of Sodium Hydno-carpate.” He points out that there is a cumulative action of the drugs, and that this is clearly seen in the slowly developing toxic action in the kidneys of rabbits and dogs, small doses producing albuminuria and possibly hemoglobinuria. He further points out that the prolonged subcutaneous treatment in dogs, instead of lessening the toxic effects, *i.e.*, nausea and vomiting, gradually increased them until the animals eventually vomited their meals and showed blood in the urine. Dr. Read considers that the hydnocarpates are probably excreted in the saliva, and concludes that there are indications that with continued treatment there is a gradual saturation of the organism with this foreign oil, which is gradually excreted in small dosage through the kidney and is not burnt up in the body like ordinary fats.

As a result of these experiments he suggests that care is needed in selecting suitable concentrations. It is difficult to apply animal experiments to man as one very seldom sees any toxic results from the use of preparations of hydnocarpus oil (chaulmoogra). It is known that the oil by mouth does produce toxic effects, but there has been very little evidence of actual toxic effects arising from any methods of injection. It would assist clinicians enormously if an optimum dose of the various drugs could be discovered. At present the size of dose is largely arbitrary.

Further articles in this issue are “Statistics of Leprosy in the Krutyje Rutschji Leprosarium, Leningrad,” by Dr. A. A. Stein, and “Leprosy in St. Croix,” by Dr. Howard Fox. Dr. Fox suggests that owing to climatic and other conditions St. Croix should be an excellent place in which to undertake an intensive laboratory and clinical study of the disease.

Dr. Gonzales Uruena gives a Summary of the First Leprosy Census in the Republic of Mexico, and points out that the distribution of centres in that country seems to indicate a stream which starts at the Pacific coast and continues through the States of Jalisco, Guanajuato and Querétaro until it arrives at the Federal District. He suggests that this current might coincide with the route followed by the active colonial trade during the Spanish rule. He further suggests that the disease may have originated in the West Indies, there having been frequent relations with Cuba. The large incidence suggests that cases are probably not discovered until they have reached adult life. The largest group of cases comes under the age period of 20—29, giving further support to the theory that the majority of cases acquire the disease during adolescence or earlier.

Dr. Rose contributes an article on “The Incidence and Treatment of Leprosy in British Guiana and the British West Indies,” which is an interesting review of the present position of leprosy in those isles.

The remainder of this Journal is confined to reprinted articles from other sources, among which is a further note on the “Cultivation of *Mycobacterium Lepreæ*,” which will be of interest to research workers.