

REVIEWS

Leprosy in India, Vol. XVI, No. 4, Oct. 1944.

Dr. Shama Rao describe a method of iodising hydnocarpus oil by dissolving 40 grs. of iodine in 10 drs. of ether and then adding this solution to one pound of sterilised oil. The editor, however, comments that the usual method of adding iodine to oil and then raising the temperature of the oil to 140° C. is better, as it effects combination of the oil and iodine and gives a solution less painful on injection.

Dr. Santra describes a survey of the Garhwal State in the United Provinces. He found over 2% of leprosy in some selected areas. The difficulty of leprosy control by the local authorities is made clear by the following quotation :—

“ A real attempt by the State to control the disease began in 1916. A census of lepers was made in that year, and 473 cases were recorded. On 26th May, 1916, the Regency Council passed a resolution on the prevention and treatment of leprosy, and a leper asylum was opened at Barahat in Uttar Kashi. The custom of isolating cases of leprosy in the outskirts of villages was to be practised more rigorously; the relatives of the patients were tied by a bond to observe the restrictions, and if they failed the leper was to be taken by force to Barahat colony and maintained there at the cost of the relatives. On the 31st January, 1917, the President of the Council paid a flying visit to Barahat; he found only 19 inmates although it was believed to have 117. He remarked that the phenomenal decrease was due to the fact that the monthly charge of Rs. 5 from the relatives of the patient for his maintenance was not paid and he was taken away home.”

Leprosy in India, Vol. XVII, No. 1, Jan. 1945.

An editorial reviews the meaning of positive Wassermann and Kahn Tests in leprosy. Positive results were found in Carville in 60% of cases, the proportion of positive being in direct ratio to the gravity of the case. Cochrane found 41% of positives in 13 cases, 21% in L2, 12% in L1 and 4.5% in neural. Positive cases becoming negative depends on improvement of the leprosy condition and not on anti-syphilitic treatment. The conclusion arrived at is that :

“ All the above observations lend strong support to the view that a positive Wassermann or Kahn test may be caused by leprosy itself, and that in a case of leprosy a positive result does not necessarily indicate the presence of syphilis. Therefore, in the absence of clinical signs or of a definite history of infection, it is not justifiable to give anti-syphilitic treatment in leprosy simply on the strength of a positive Wassermann or Kahn test.”

Doctors Dharmendra and Santra report the results of intensive leprosy surveys in small selected areas in different parts of India. The following are some of the more interesting deductions :—

“ The incidence of leprosy in the area surveyed varied from 0.17 to 6.6%. The areas surveyed have been deliberately selected, places known

to have a high incidence of leprosy being selected. The figures for incidence, therefore, do not apply to the provinces as a whole.

" Most of the areas included in the present surveys had been surveyed previously by the same worker. Those previous surveys were rough sample surveys of more extensive areas. During the present intensive surveys, the figures for gross incidence have been much higher, and the figures for the lepromatous-rate much lower, than similar figures obtained in the rough surveys. This has a bearing on the probable total number of cases of leprosy in the whole of India. On the basis of rough surveys it was estimated that there may be about 1 million cases of leprosy in India, but the findings made in the present surveys indicate that this number is an under-estimate.

" It has been possible to study the epidemiological features of leprosy in people of the same races living in different areas. The epidemiological features in the same race vary from place to place, and there is no one picture characteristic of the race as a whole. It would thus appear that it is impossible to explain the observed variations on the basis of racial differences alone.

" The findings made in the different racial groups living side by side in the same area indicate that the observed epidemiological variations cannot be explained on climatic grounds alone.

" A factor which appears to have a bearing on the observed variations is the attitude of the people towards leprosy, and the presence or absence of a custom of isolation of leprosy patients in a community. In areas in which there exists ostracism of the leprosy cases, and where some sort of isolation is practised, a high lepromatous-rate is associated with a low gross incidence, and a low child-rate. On the other hand, in the areas where no isolation is practised, a lower lepromatous-rate is associated with a higher gross incidence, and a higher child-rate."

Leprosy in India, Vol. XVII, No. 2, April, 1945.

Drs. Dharmendra and S. N. Chatterji describe a case of trigeminal neuritis resembling leprosy. Anaesthesia, analgesia and loss of thermal sensation corresponded exactly with the skin distribution of the three branches of the left 5th nerve, except for that of the ear. The history was that of severe pain in the parts affected, coming on after smoking cannabis indica. The pain was later followed by the loss of sensation. The main points in differential diagnosis are:—

" The above history and findings did not justify a diagnosis of leprosy. The history of onset is not like that in leprosy; in leprosy pain is not a prominent feature, and is seen only when a nerve is inflamed and thickened during the course of the disease; in the case under report acute pain was the first sign, and anaesthesia came on only later. The findings in the case did not fit in with the diagnosis of leprosy; if it were a case of leprosy, with such an extensive anaesthesia one would expect to find thickening of some of the branches of the trigeminal nerve, some local changes in the skin of the affected part, and some paresis of the eye muscles."

A description is given of the action taken by the people of Purulia to deal with the surplus lepers who could not be admitted to the Mission Leprosy Home for want of room, and who were accustomed to wander about the town and beg.

This problem exercised the mind of both the officials and the citizens of Purulia for several years, and ultimately a Leprosy Relief Association was formed in Purulia in 1936, with the object of checking the spread of infection by the mendicant lepers. It was decided to obtain a site at a little distance from the town, and to build sheds there so that the leper beggars may have a shelter at night, and may not sleep on the verandahs of private houses, market places and railway stations, etc.

These efforts resulted in the foundation in 1937 of the Naba-Kustha-Nibas (the new leper home) which stands on the bank of the river Kosai, about 4 miles from the town. The management of the Naba-Kustha-Nibas was later placed in the hands of a joint committee appointed by the Manbhum District Board and Purulia Municipality.

The Naba-Kustha-Nibas was originally intended to be a shelter at night for leper beggars of Purulia, but in practice the scheme has gone far beyond this. The Nibas is now a regular home where the patients live a communal life, and get all the benefits of treatment. Originally there was accommodation for only 90 patients, but at present there are about 250 inmates, and at one time their number was much higher.

The Naba-Kustha-Nibas has removed a long-felt need of Purulia. This is an institution which has risen and grown to meet local needs and as a result of local efforts, both official and non-official. It has clearly demonstrated what local efforts can achieve in the field of leprosy. At the start many people regarded the scheme as impracticable, but the sincere efforts of the organisers have belied all the misgivings."

Leprosy in India, Vol. XVII, No. 3, July, 1945.

This number contains a paper by Dr. Dharmendra on recent synthetic drugs and future lines of investigation. After reviewing diasone, promin, promizole and other drugs, he says :—

"We have seen that on the whole the sulphonamide group of drugs have not proved highly effective in the treatment of leprosy and tuberculosis. This feeble activity of several members of this group towards mycobacterial diseases, notwithstanding their efficacy in other bacterial infections, may possibly be related to the high lipid content of the mycobacteria. It is possible that the outer 'waxy' layer of these organisms prevents access of the drugs into their interior. If it were so, any change in the molecular architecture of the sulphonamides which makes them lipophilic will be expected to make them mycobactericidal, since once the outer layer is penetrated the mycobacteria may succumb to the further action of the chemotherapeutic agents, or their active derivatives elaborated *in vivo*.

"In the light of the information already available, it is conceivable that some potent mycobactericidals may be found in the group of the lipophilic sulphonamides mentioned above. In this connection the chaulmoogric derivatives are of special interest. It is possible that by incorporating the active principles of the chaulmoogra oil in the sulphonamide molecule, we may be able to get the combined effect of the two well-known remedies.

"It is also likely that lipophilic derivatives of the diamino-diphenyl sulphone group may offer advantages in the matter of greater efficacy and lesser toxicity over promin, diasone or promizole.

"In a scheme of research concerned with the chemotherapy of leprosy it would be most interesting to study the efficacy in leprosy of the following compounds:—

1. Sulphonamides of proved value after they have been rendered lipophilic by the incorporation of their molecules of long chain alkyl and acyl groupings, including those derived from chaulmoogric and hydrocarpic acids, the active principles of chaulmoogric oil.

2. Substances related to 4 : 4'-diamino-diphenyl sulphone, and their lipophilic derivatives."

ERRATA.

1. By mistake it was stated in the last number of the Review that it was edited by Sir Leonard Rogers. Actually it was edited by Dr. Ernest Muir, the Medical Secretary, for whom Sir Leonard had kindly acted as editor during his absence up to February 1945.
2. In the last number of the Review on page 6, lines 8 and 9 should read as follows:—
"In patients with Hb percentages of less than 71