

BOOK REVIEWS

Sbornik Nauchnykh Rabot po Leprologii i Dermatologii. [Collected Scientific Papers on Leprology and Dermatology.] No. 12, 1959. Rostov-on-Don, Rostov Book Publishers, 260 pp.

This volume, which is similar to the No. 8 issue of the series [see *THE JOURNAL* **28** (1960) 350-352], contains 14 articles pertaining to leprosy, out of the total of 31. Notes from the summaries of 12 of them follow, in consecutive order; 2 are of purely local interest. (Professor Torsuev informs us that the Nos. 9 and 11 issues of this series are no longer available.)

GORDIENKO, A. N., TORSUEV, N. A. *et al.* *Bioelectric activity and reactivity of the cerebral cortex in leprosy patients* (pp. 3-17).—Electroencephalographic exploration of the bioelectric activity of 17 patients with lepromatous and 10 with tuberculoid leprosy showed that in lepromatous cases the most marked spontaneous activity is observed in the frontal lobes. In certain cases there is a slow deviation of the potentials which corresponds to predominance of the process of inhibition; more rarely are seen rapid oscillations of the peak type which indicate a more intense process of irritation. The coordination of the activity of the two frontal lobes is altered. In the posterior region of the cortex the alpha rhythm is irregular and unstable and coordination is incomplete, but not as much as in the frontal lobes. The index of reactivity, and especially of excitability, is lowered, which indicates a predominance of the process of inhibition. In tuberculoid

leprosy the alterations of the central nervous system are similar, but they are less intense. Clinical cure does not result in disappearance of these nervous manifestations.

PEREVODCHIKOF, I. P. *On the dystrophies of the skin in leprosy* (pp. 18-21).—A study of the dystrophic lesions of the skin in leprosy of the malign and benign forms has shown that the most marked alterations are found in tubercloid cases. In indeterminate leprosy they are often asymmetric. In the lepromatous form they are observed only in the presence of lesions of the peripheral nerve trunks.

BUKING, E. P. *Contribution to knowledge of certain special forms of lepra reaction* (pp. 22-36).—There are presented 3 cases of atypical lepra reaction with acute infiltration which is characterized by acute cutaneous eruptions of dimorphous histology, with few leprosy bacilli. The Mitsuda reaction is positive. After the disappearance of these eruptions the case is found to be in the regressive phase of typical lepromatous leprosy, or even clinically cured. These eruptions improve rapidly under antileprosy treatment, e.g., intradermal injections of chaulmoogra derivatives. The prognosis is favorable, although certain complications of the reactional state, such as neuritis, arthritis, and iritis, may have serious consequences.

MIRZOEY, F. P. *Changes of the ears in patients with lepromatous leprosy* (pp. 37-40).—In observations made before the sulfone era it was found that among 334 patients with lepromatous leprosy, 227 (68%) showed deformities of the pavillon of the ears. These are described.

TRAPEZONTSEVA, R. A. and VESSELOVSKY, K. A. *Residual nonprotein nitrogen in the blood in leprosy* (pp. 41-46).—In a study of 82 cases (164 determinations) it was found that there is an increase in the blood content of residual nonprotein nitrogen. The amount varies with the type of the disease, and with its severity and the state of the patient. The greater part of the substances in question derives from wastes of protein metabolism which are eliminated from the organism.

TRAPEZONTSEVA, R. A. and VESSELOVSKY, K. A. *Determination of bromine in the blood of leprosy patients* (pp. 47-53).—From the results of 1,633 analyses of the blood of 76 cases the authors conclude that in the majority of them the blood chlorides are notably reduced, between 380 and 435 mgm. per cent. This reduction is most marked in the progressive forms of the disease, while antileprosy treatment leads to normalization of the chloride level. This effect is the most clearly marked in tubercloid cases. [Nothing is said in the summary of the bromine levels.]

STEIN, A. A. *The topographic distribution of lepra bacilli in apparently healthy skin of leprosy patients* (pp. 54-58).—Examination of material obtained by scarification of clinically healthy skin of lepromatous patients has revealed bacilli in the bend of the elbow, the folds of the groin, the region of the anus, and the axillae. Bacilli are also found frequently in the skin of the fingers and of the face.

ORLOVA, M. E. *A new method of calculating the bacteriologic index in leprosy* (pp. 59-63).—For this purpose the author recommends the use of the method of Dharmendra, but also taking into account the atypical forms of the bacilli. Thus the index is a fraction of which the numerator corresponds to the normal forms and the denominator to the bacilli of modified morphology. By using this procedure a more complete picture of the bacteriologic evolution of the case is obtained, especially in the course of treatment. One then sees the numerator lower little by little to zero; the denominator, which is often null at the beginning, at first increases and then lowers progressively, reaching zero a little later than the numerator.

STEIN, A. A. *Influence of chaulmoogric medicaments on the sensory function of the skin of leprosy patients* (pp. 64-68).—The author has observed that chaulmoogra derivatives may have a favorable influence on the state of sensitivity of the skin. The simultaneous use of these medicaments and sulfone therapy may be recommended in the presence of initial symptoms of neural disturbances.

GAROUSS, J. I. *Sulfone treatment and the ocular system* (pp. 77-80).—Since the introduction of the sulfones there has been a notable reduction of the number of cases with

ocular lesions, and the effects of such complications has become less serious. Lesions of the limb are no longer seen. Inflammation of the sclera, and exacerbations of existing lepromatous lesions of the eyes are seen only in exceptional cases.

TORSUEV, N. A. *The malady of Stefansky; an experimental model of human leprosy* (pp. 90-92).—From reports in the literature and personal observations the author insists that it is impossible to apply the results of therapeutic experiments in rat leprosy to the treatment of human leprosy.

STEIN, A. A. and DETUC, E. S. *Experimental study of the influence of trauma and of ultraviolet light on the distribution of leprosy bacilli in the skin of rats* (pp. 93-97).—Repeated mechanical trauma, even slight, and also exposure of certain areas of the skin to ultraviolet light, provokes the appearance of lesions in the areas so treated.—H. W. W.

HIND KUSHT NIVARAN SANGH. (Indian Leprosy Association.) Annual Report 1958. New Delhi. 74 pp.

As usual, this report is divided into three parts, the first of which, by Amrit Kaur, covers much territory—WHO, UNICEF, and internationally-aided campaigns; the Leprosy Control Scheme of the Government of India, and its establishments; the Central Leprosy Teaching and Research Institute, in Madras; the Mission to Lepers; the Gandhi Memorial Leprosy Foundation; and the Belgian Leprosy Centre, at Polambakkam. Part II contains the financial report of the Sangh, and Part III the reports of the state branches. (The Madras branch has a separate, 68-page report, apparently prepared by T. N. Jagadisan.)

Research is discussed in two sections, one of which deals with projects being carried on by several workers under the auspices of the Indian Council of Medical Research. It is possible only to pick out a few items here and there.

At the Research Center (under Dharmendra) it has been confirmed that Ciba 1906 (DPT) is effective, not better than DDS but useful as an additional drug. At the Centre's clinic for children at Saidapet it still holds true that the prognosis of children with most nonlepromatous lesions is good without special treatment, but of the few diagnosed as incipient a majority (19 of 35) have gone lepromatous.

In Calcutta (under N. Mukerjee) tracer studies with DDS marked with S³⁵ have shown much concentration in the lesion tissues. Among other things, an antigen prepared from the Kedrowsky bacillus has given early skin reactions much as does the Dharmendra antigen. Histochemical studies have led to the conclusion that the presence of lipids in vacuolated or foamy macrophages is probably caused by cytoplasmic degeneration of the cells. (Other studies are listed.)

In Bombay (under V. R. Khanolkar), it has been concluded that there is a correlation between early and late reactions to lepromin, recognizing that there are early negatives who give the late reaction, and *vice versa*. If late reactions with the Kedrowsky antigen are to be considered in typing cases, it has been found, they are liable to cause considerable confusion. Late reactions to an antigen prepared from normal human liver were practically absent in tuberculoid cases, and entirely so in lepromatous cases.

Also in Bombay (Dr. Figueredo) several other studies have been carried on, including study of contacts, and some noncontacts, for lesions and bacilli; prophylactic treatment of contacts, with indications that a combination of DDS and INH is better than DDS alone for clearing the bacilli; and one which showed that repeated injections of the Dharmendra antigen lowered the reactions, both early and late, in 4 tuberculoid cases.

In Vellore (Dr. Brand) the work on deformities has progressed along several lines, which are listed and cannot be condensed further.—H. W. W.