

Editorial

LEPROSY—EAST AND WEST OF SUEZ

The invited articles dealing with leprosy control that have appeared in the pages of the last two issues of *Leprosy Review* provide an interesting and, in many ways, salutary conspectus of typical situations. They emphasize the extremely wide range of factors that have to be considered in formulating and executing plans of campaign. It is not only that prevalence rates differ from one country to another, but that a whole series of factors—social, economic, geographical, financial, to mention a few—vary in importance and in their influence on the dimensions and the tractability of the leprosy problem. The attitudes both of the common people and of those who lead and govern, compounded as they are of historically conditioned and deep-seated beliefs, determine in large measure the degree of success or failure of any plan of action, however well conceived.

A medical factor that bursts forth repeatedly through these factual reports of the field application of control measures is the wide variation in the pattern of clinical leprosy. Individual lesions, and individual skin and nerve responses may, of course, be matched between one country and another, but the *ensemble*, the overall picture, of leprosy varies within wide limits. The low lepromatous/tuberculoid ratio and the low population densities in Africa may account for the confident optimism and relative satisfaction with present-day chemotherapy that characterize workers in that continent. Although it may be that in time regular, frequent and complete whole population surveys east of Suez would disclose more patients with indeterminate and tuberculoid leprosy than today's estimates suggest, the fact remains that, among diagnosed patients, there is a higher proportion of serious multibacillary (lepromatous and borderline), progressive leprosy in India and the East generally. (Incidentally, the numbers of self-reporting patients with severe deformities and mutilations and eye damage should alert public health authorities

to the probability that the prevalence of leprosy may be much higher than they imagine.)

In the East, moreover, there is a higher proportion of patients with borderline types of leprosy who show clinical and immunological deterioration. Not only does leprosy appear to install itself widely in the body, but it progresses rapidly, causing early—even precocious—symmetrical polyneuritis, and early and severe eye damage. The skin lesions are succulent; sensory loss in the ulnar nerve distribution may be an early sign of impending rapid paralysis of the intrinsic muscles of the hand; facial palsy, unilateral or bilateral, is a common and not always a late sign. These intermediate varieties are unstable and unpredictable, with a distinct tendency towards the lepromatous. The proportion of patients with polar tuberculoid leprosy is lower to the east of Suez than to the west, and in the extreme east (e.g. Japan) well-defined hypochromic flat lesions, with or without papular borders, are uncommon. Associated with this fact is the occurrence, at the other extreme of the immunological spectrum, of rapidly progressing lepromatous disease, involving the entire skin and upper respiratory mucosa, with alopecia and early madarosis, and early widespread polyneuritis.

Reactional episodes, too, east of Suez tend to be more frequent, more severe and more prolonged. The rise in body temperature is higher and more sustained. Individual nodosal elements show a greater tendency to persist and to ulcerate; they may appear in greater numbers and in unusual situations (e.g. the pretibial skin). Eye damage occurs earlier, and more frequently, allergic iridocyclitis appearing in patients whose disease may have been classified as borderline. Arthralgia is more common, as is effusion into the joints, particularly the knees and elbows.

Histologically, these lesions of near-lepromatous leprosy are characterized by a highly bacilliferous granuloma, with scanty round cells and minimal focalization. The nerve fibrils show early damage, and are infiltrated with both

inflammatory cells and bacilli. Huge multinucleate globi containing 200 or more bacilli are not uncommon. The bacillary concentration in tissues removed from the region of the eyebrows and chin is marked. The response to treatment of the underlying disease, as well as that of the reactional episode, is more uncertain and in general slower.

These, then, are the broad clinical differences noted between leprosy as seen east and west of Suez. The bacilli inoculated into the mouse foot-pad, whatever their "country of origin", appear to multiply in similar fashion; in other words, no strain differences are apparent, to

judge from this isolated criterion of capacity to multiply in the non-natural immunological and biochemical micro-environment of the mouse foot-pad. If the "seed" possesses no inherent significant modifying properties that would account for the epidemiologically important variations observed, the "soil" may eventually prove to be the changeable factor. Recent work on genetically-determined response patterns may provide the explanation.

Meanwhile, faced with the practical problems of leprosy control in these varying contexts, the field worker must apply existing knowledge in the best possible way for the sake of the present and future generations.

5th Technical Meeting of OCEAC, Yaounde, 4-7 March, 1970

OCEAC (Organization de Co-ordination pour la Lutte contre les Endémies en Afrique Centrale) is the co-ordinating body of the "Services des Grandes Endémies" in several countries, viz. the Federal Republic of the Cameroons, the Central African Republic (RCA), The Peoples' Republic of the Congo, Gabon, and Tchad.

Reports presented at the 5th Annual Meeting on the leprosy situation in 1969 for these countries, supplied the following data:

| <i>Countries</i> | <i>Total cases</i> | <i>Prevalence per 1000</i> | <i>New cases, 1969</i> |
|------------------|--------------------|----------------------------|------------------------|
| Eastern | | | |
| Cameroon | 5899 | 5.4 | 1160 |
| Western | | | |
| Cameroon | 49,660 | 11.6 | 3018 |
| Congo | 15,940 | 16.5 | 526 |
| Gabon | 9620 | 20.3 | 574 |
| RCA | 31,380 | 20.3 | 989 |
| Tchad | 35,617 | 11.4 | 1852 |

Trends in prevalence and case-detection from 1966 to 1969 in the 5 countries (except Western Cameroon) were as follows (per 1000 of the population):

| | 1966 | 1967 | 1968 | 1969 |
|------------|------|------|------|------|
| prevalence | 17.2 | 15.7 | 14.0 | 12.9 |
| incidence | 0.90 | 0.87 | 0.75 | 0.70 |

From 1960 to 1969, a total of 98,166 leprosy patients were detected. During the same period 179,644 patients were removed from the register (discharged, deceased, etc.). From the beginning of leprosy control activities, 51,397 patients had been declared cured. Out of 148,116 patients registered on 31 December, 1969, 64,597 were either inactive and under surveillance, or discharged (43.6%). As emphasized by Dr. Labusquière, the general-secretary of OCEAC, it is worthy of note that countries that have concentrated on systematic out-patient treatment, such as RCA and Tchad, have a higher proportion of patients in whom the disease has become quiescent (77.0 and 63.6%, respectively) than countries, such as the Cameroons, where the main effort has been concentrated on leprosaria (43.6% of inactive cases in Western Cameroon).

The original scientific contributions presented at the meetings are to be published. Mention should be made of papers by General J. Languillon on the treatment of lepromatous leprosy by long-acting sulphonamides (Fanasil) and dapsons in low dosage, and the paper by Professor M. F. Lechat on epidemiometric models for the evaluation of leprosy control activities.

ELEP Medical Commission

The Medical Commission of ELEP (The European Federation of Anti-Leprosy Associations) met in Luxembourg on 21 March, 1970, under the chairmanship of Dr. L. P. Aujoulat. At the Annual General Assembly the following day, important reports from the Commission were presented on such matters of policy as: the pros and cons of the segregation of patients with lepromatous leprosy; the separation of children from parents suffering from leprosy; the principles of barrier nursing as applicable to leprosy patients in the wards of general hospitals. A document entitled *Guidelines and principles in the worldwide campaign against leprosy*, drawn up by the Medical Commission with a view to assisting both non-medical administrators in the evaluation of projects and doctors in the choice of priorities, was received with expressions of gratitude.

The following additional members were appointed to the Medical Commission: Professor P. G. Janssens (Belgium), Professor M. F. Lechat (Belgium), Dr. E. Montestruc (Mar-

tinique), and Dr. K. F. Schaller (Germany). Dr. Ernest Muir, the doyen of European leprologists, was accorded the high distinction of being elected *Membre d'Honneur* of ELEP.

The member-organizations agreed to continue their policy of devoting a certain proportion of their income to the fostering of research and the publication of the results of research in *The International Journal of Leprosy and Other Mycobacterial Diseases*.

The Leonard Wood Memorial was welcomed as an Associate member of ELEP.

The voluntary agencies play a considerable rôle in the campaign against leprosy. Through consultation, co-operation in joint projects, and the prevention of overlapping and duplication of effort, ELEP is in process of achieving its aims. The Medical Commission, by its advice on specific projects and its insistence on priorities in leprosy control, is helping to mould opinion and ensure that public interest is based on established scientific principles as well as on humanitarian considerations.

Surgeon

required for

All Africa Leprosy and Rehabilitation Training Centre

A surgeon is required to teach all aspects of the surgical care of leprosy patients up to post-graduate level.

Qualifications: F.R.C.S. or equivalent and specific training in orthopaedic surgery or plastic surgery with special experience in the surgery of the hand.

The appointment will be in Addis Ababa, with visits to a rural area at intervals. Three years contract, renewable. To begin approximately January, 1971.

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