

NEWS AND NOTES

Information concerning institutions, organizations, and individuals connected with leprosy work, scientific or other meetings, legislative enactments and other matters of interest.

THE LEONARD WOOD MEMORIAL WORKING CLINICAL CONFERENCE

Held in Japan, September 15-27, 1952

under the auspices of the
*Leonard Wood Memorial and the
Ministry of Health and Welfare
of the Japanese Government*

The establishment by the Leonard Wood Memorial of the first series of an international study for the clinical evaluation of certain selected drugs and combination of drugs used in the therapy of leprosy was reported in the last issue of *THE JOURNAL* [20 (1952) 269]. Three units were set up and especially equipped, with the active cooperation of the government entities concerned, in the Westfort Institution at Pretoria, Union of South Africa, the Eversley Childs Sanitarium, at Cebu, Philippines, and the two national leprosaria—Aisei-en and Komyo-en—on Nagashima Island, Japan.

The active treatment work commenced in the different units named on February 25th, March 3rd, and April 14th, respectively, after completion of the preliminary examinations of the patients by the research leprologists engaged for the work and by the consultants. The treatment was to continue for 32 weeks. The first check examinations by the consultants were made after 16 weeks, and another is to be made at the end, these examinations to be done independently of the working leprologists and without knowledge of the treatment groups to which the patients belonged.

After this work was started, plans were made and special funds were secured by Dr. James A. Doull, medical director of the Leonard Wood Memorial, for a conference to be held in Japan of the leading workers and others concerned in the matter. This conference was convened on September 15th, and continued for two weeks.

Thirteen members from abroad participated. From the United States, besides Dr. Doull: Dr. L. F. Badger, USPHS, in charge of the Leprosy

Section, Communicable Disease Center, Atlanta, Ga.; Dr. Chapman H. Binford, USPHS, in charge of the Leprosy Registry, Armed Forces Institute of Pathology, Washington, D.C.; Dr. William G. Cochran, professor of biostatistics, Johns Hopkins University, Baltimore; Dr. Herman H. Gray, USPHS, assigned to the Board of Health of California in connection with leprosy and other problems; Dr. Fred C. Kluth, epidemiologist, Leonard Wood Memorial, stationed in Texas; Lt. Jack W. Millar (MC) USN, on temporary assignment with the Leonard Wood Memorial; and Dr. Rolla R. Wolcott, executive officer of the Federal Leprosarium at Carville, La. From the Philippines: Dr. Ricardo S. Guinto, epidemiologist, Leonard Wood Memorial, Cebu; Dr. José N. Rodríguez, chief of the Leprosy Division, Bureau of Hospitals, and consultant for the Cebu unit; Dr. José G. Tolentino, research leprologist at that unit; and Dr. H. W. Wade, associate medical director and pathologist, Leonard Wood Memorial, of Culion. From South Africa: Dr. A. R. Davison, director of the Westfort Institution and research leprologist of the unit there.

Of the many Japanese physicians who participated, the following are mentioned specifically, not including numerous prominent individuals, members of the collaborating Chemotherapy Committee or otherwise concerned, who took part in the general sessions in Tokyo: Dr. Kensuke Mitsuda, director of the Aisei-en National Leprosarium, Nagashima; Dr. Ryoichi Jingu, director of the Komyo-en National Leprosarium, Nagashima; Dr. Yoshinobu Hayashi, director of the Tama Zensho-en National Leprosarium, at Tokyo, consultant; Dr. Taiji Noshima, director of Seisho-en National Leprosarium, on Oshima Island, consultant; Dr. Tadao Miyata, chief medical officer, Aisei-en, research leprologist; Dr. Masashi Namba, chief medical officer, Komyo-en, research leprologist; and Dr. Owada, of Keio University, Tokyo, who had made special audiometric studies of the Japanese patients. Besides these, numerous other members of the staffs of the two leprosaria concerned took active part. One observer from the Government of Formosa attended. Four special interpreters, three of them medical men, served throughout the affair.

The purposes of the conference may be said to have been, in essence—apart from promoting personal acquaintances among those from different regions who were concerned with the studies and understanding of each other's points of view—to ascertain how well those engaged in the work agreed in their procedures, especially with respect to the examining of cases and recording of their lesions; to attempt to approach more closely to uniformity in terminology with respect to the lesions and reactional phenomena seen in lepromatous cases (not involving the general problem of classification); to consider the experiences and results so far in relation to the rest of the present experiment; and, in the light of that experience, to consider plans for the next series of experiments.

After three general, introductory sessions in Tokyo, the members of the working conference—appropriately so named, it turned out—moved to Nagashima, near Okayama, where

the foreign contingent was quartered at Aisei-en. From Thursday, the 17th, through Wednesday, the 24th, the time was fully occupied, most of the work being done at Aisei-en but a part of it at Komyo-en, some ten minutes away by launch. On the 25th, after a final general session at Komyo-en, a third leprosarium, Oshima Seisho-en, was visited by boat, and—after a free day at Kyoto—the closing session was held in Tokyo on the 27th.

The work of the conference consisted mainly of three phases: general sessions of the entire conference, clinical sessions by groups, and committee activities. One group, headed by Professor Cochran, worked entirely on statistical analyses of various reports, including those produced during the conference by the clinical teams.

At the general sessions several prepared papers on selected topics were presented, but most of those meetings were devoted to consideration of reports. These included, among other things, a statistical analysis of the 16-week reports that had been rendered, the findings of ear-function tests of the groups receiving streptomycin, and the reports of the conference committees, which led especially to discussions pertaining to future work. Higher improvement rates were reported from the Westfort and Cebu institutions than for the Japanese ones, perhaps because in the latter most of the patients had long been under promin treatment before being taken into the experiment. It was not regarded as disappointing, in view of the short period of treatment, that no single regimen had as yet shown definitely better results than the others, but it was unexpected that the data of two of the units gave essentially the same improvement rates for the control groups as for the others. The cases under streptomycin medication, as that was applied, had shown no disturbance of hearing.

For the clinical sessions, of which there were seven, there had been set up seven teams of workers, five of which worked at Aisei-en while the other two commuted daily to Komyo-en. Each team comprised two examiners, one a senior Japanese and the other a foreigner, together with two other local men serving as reporter and recorder and two nurses assisting. The examiners decided on the kinds and degrees of lesions present, after which their findings were compared with those of the research leprologist and the consultant. In all, 188 patients were so examined, and the committee set up for the

purpose reported fairly good agreement in 48 per cent of the cases, essential agreement with minor differences in 23 per cent, somewhat more disagreement in 20 per cent, and marked disagreement in 9 per cent. In what the more serious disagreements consisted was not brought out.

It was planned that if the leaders of a team should disagree seriously about a case, it should be referred to another team. That was done only once, with a case of some interest. The Japanese member of the original team called it lepromatous, while the other member held it to be tuberculoid. The reference team was similarly divided, the Japanese member again holding the case to be lepromatous, while the other recorded, "reactional tuberculoid, liable to become borderline with repetition of reactions." A biopsy specimen was then obtained and examined later at Cullion. The condition proved to be lepromatous, recessive, with no discernible stigmata of a previous tuberculoid condition. It appears that in Japan there are lepromatous cases, recognized as such there, which are deceptive to workers in other countries.

Seven committees were set up, on Terms and Definitions, Statistics, Staining and Histopathology, Photography, Therapy, Reporting of Clinical Examinations, and Resolutions. The first of these had the most difficult task, the subject proving highly controversial in certain respects, and its final report could not be rendered until the last general session. The situation regarding the designation of lesions was found at the outset to be such that the period which had been scheduled for the first clinical session was converted to a special one for this committee, which then demonstrated cases which illustrated what had been agreed upon at that time. Because this matter is of general interest, and may be brought before the next international congress, the report of this committee is given in full below.

The Committee on Staining and Histopathology concerned itself mainly with the technique of staining the leprosy bacillus in smears, and with that of handling biopsy specimens to be examined rather than with histopathological findings. The most interesting thing brought before this group was a report by Dr. Badger of the findings in a preliminary study comparing the results with the regular Ziehl-Neelsen technique, as set down for use by the study units, with those obtained when Gabbett's sulfuric acid-methylene blue solution was used for simultaneous decolorization and counterstaining. The following partial data illustrate the findings. Although the study has not been completed, and will be reported on later, it has been found that the Gabbett method is far superior in results as well as convenience.

The results with Gabbett's solution, it was found, varied with the time of application; that should not be less than 30 seconds nor more than three minutes. With respect to the numbers of negative fields, there were 148 after Ziehl-Neelsen, but after Gabbett's 30 seconds only 16, 90 seconds 13, and 3 minutes 11. Graphs showed curves of the numbers of fields containing different numbers of bacilli. In that for the Ziehl-Neelsen method, the peak was in the 1-bacillus column, representing 184 fields; for the Gabbett method after the different exposure times the peaks were: 30 seconds, in the 3-4-5 bacilli columns, with 107, 104 and 104 bacilli, respectively; 90 seconds, in the 4-bacilli column, with 114 fields; 3 minutes, in the 5-bacilli column, 133 fields.

As for the other committees, some of their findings have been mentioned, and others could not well be dealt with in a report such as this one. The duty of the Resolutions Committee was simply to prepare formal resolutions of thanks and appreciation addressed to the various entities and offices, in Japan and elsewhere, which had in one way or another contributed to the preparation and functioning of the conference or had provided entertainment.

The conference was thoroughly successful and worthwhile, and enjoyable as well, and much credit goes to all concerned in its initiation, organization and operation. It was the consensus that probably in no other leprosarium, anywhere, could so large a group of visitors be accommodated and cared for as well, in the matter of catering and otherwise.

—H. W. WADE

REPORT OF COMMITTEE ON TERMS AND DEFINITIONS

The following definitions of active lesions are recommended:

1. *Macule*.—The term macule signifies a circumscribed area of skin of abnormal color—varying widely in this character in different races but usually hypopigmented, occasionally hyperpigmented, and often erythematous—and commonly with other surface abnormalities, such changes being evident in the whole or only in parts of the area. In the terminology of leprosy it is used without regard to the presence or absence of infiltration or elevation. (From the definition adopted by the Cairo Congress.)

Macules may be found in any form of leprosy, and in recording them their nature should be indicated by appropriate qualifying terms, e.g., lepromatous, tuberculoid or simple.

The lepromatous macule, level with the surrounding skin or slightly elevated, is characterized by the fact that while the form can be perceived the outline cannot be sharply defined; by lack of marked sensory disturbance; by positive bacteriological findings; and by lepromatous histological structure. It is commonly erythematous and therefore reddish in color, but it may be yellowish-brown, or hypopigmented and pale, or hyperpigmented. When the reddish macule is pressed by glass the color disappears.

2. *Plaque*.—A plaque is a more or less circumscribed lesion which is markedly elevated above the surrounding skin, the surface usually flat and

without resolution and depression of the center. The color is variable, reddish, brownish-red, yellowish-brown, dark brown, etc. Plaques may occur in both lepromatous and tuberculoid leprosy.

The lepromatous plaque has a diffusing margin (in contrast to the sharp margination of the tuberculoid plaque), is not necessarily anesthetic, is invariably bacteriologically positive, and the patient almost always gives a negative response to the Mitsuda test.

In distinguishing between a small plaque and a nodule, size is significant, and also to some extent the outline. Plaques are usually larger than 2 cm. in diameter, and they tend to be elongate in shape rather than round.

3. *Papule*.—A papule is a small, more or less solid, circumscribed, superficial elevation of the skin, usually but not necessarily circular, conventionally described as varying in size from that of a pinhead or less to five millimeters in diameter (split-pea size). Papules occur in both the lepromatous and tuberculoid forms of leprosy, and they differ correspondingly in structure and often in appearance. (The Cairo Congress definition, slightly modified).

4. *Nodule*.—A nodule is a solid, rounded, circumscribed elevation of the skin, morphologically similar to a papule except that it is larger. Ordinarily the term is applied to lepromatous lesions, but morphologically similar lesions may occur in tuberculoid cases.

Lepromatous nodules may be confined to the skin, where they are usually more deep-seated than papules; they may involve both the skin and the subcutis, or they may be entirely subcutaneous. The maximum size of the cutaneous nodule is about 2 cm.; subcutaneous nodules may be larger.

5. *Infiltration*.—This term is commonly applied to a diffuse thickening of lepromatous nature involving the skin or mucosa which is not of definite nodular, papular, or macular form. The term may also be applied to diffuse lepromatous conditions in other organs. (From the Manila Conference definition.)

(Note: This Committee has not concerned itself with the definitions of leproma and lepride.)

6. *Erythema nodosum leprosum*.—This condition is manifested by acute red nodules which may appear in crops in the course of lepromatous leprosy. Such lesions may appear in the natural course of the disease, or during the healing process resulting from treatment; they usually occur in the more advanced stages of the disease. The severity of the attacks varies greatly, ranging from a few lesions with little or no constitutional symptoms to widespread distribution of the acute nodules with marked general symptoms.

This condition may become chronic, and acute and chronic lesions may coexist.

The distinguishing features of acute E.N.L. are given in the table below, which shows the differential diagnosis between this condition and acute lepromatous infiltration.

7. *Acute lepromatous infiltration*.—This term is applied to a rather sudden appearance of one or more red infiltrated areas which may fuse together to involve extensive areas of skin, developing in the lepromatous

type. The following table gives the main distinguishing characteristics of acute erythema nodosum leprosum and acute lepromatous infiltration.

Acute Erythema Nodosum Leprosum

1. Rapid course, each individual nodule lasting only about one or two weeks.

2. Nodules usually appear in crops which frequently overlap each other in time of appearance. They commonly occur on the sites of previously existing lepromatous lesions, apparent or inapparent.

3. Marked constitutional symptoms may be present, with high irregular fever, although sometimes the patient is afebrile.

4. May be accompanied by neuritis, joint pains, iridocyclitis, tenderness on shins and infrequently on frontal bone.

5. Lesions are tender.

6. Blebs and pustules may form on top of the eruption lesions in severe cases.

7. After healing there may remain: (a) hyperpigmented flat macules, (b) chronic E.N.L., (c) subcutaneous nodules, or (d) no residuum.

Acute Lepromatous Infiltration

1. Longer duration of the lesions.

2. The lesions appear rapidly to cover more or less extensive areas. When they spread they do so by rapid extension, and fusion of separate areas may occur.

3. Fever is seldom seen, and if present is rather low.

4. Not accompanied by such complications.

5. Lesions not painful on pressure.

6. Pustules do not occur.

7. After healing there may remain (a) tissue-paper macules, (b) hypopigmented macules or (c) hyperpigmented macules.

Addenda by the Committee

1. Some of the members of the Committee consider that the lesions of what is designated as acute lepromatous infiltration are so similar to some of those of relapsing borderline cases (also known as recidivating tuberculoid) as to make their differentiation most difficult.

2. Some of the members of the Committee believe that the term "lepra reaction" should no longer be used; that the condition to which the term has been applied in the past actually consists of the two syndromes dealt with above, namely, erythema nodosum leprosum and acute lepromatous infiltration. Certain other members believe that the two syndromes referred to do not comprise all forms of reactional conditions in lepromatous leprosy.

It is agreed (a) that the matter should be studied further by the several investigation units, (b) that for the purposes of the present series no change should be made in the recording of the phenomena observed; and (c) that when there occur conditions such as iridocyclitis or joint pains not listed in the [record sheet, used in the present study] they should be recorded in the blank lines on that sheet.

Addendum by the General Session

On the basis of comments by the Japanese contingent, the General Session, on Wednesday, September 24th, agreed to adopt the report of the Committee with the following addendum:

Certain members of the Conference believe that there are points for further discussion in various sections of the Committee's report. It is proposed that these matters be studied further and be considered at the next opportunity.

6 FIRST W.H.O. EXPERT COMMITTEE MEETING

The first session of the Expert Committee on Leprosy, World Health Organization, will be held in Rio de Janeiro and São Paulo, Brazil, from November 10 to 18, 1952. This group, drawn from the larger Expert Panel with consideration of the topics to be dealt with and a suitable representation of the countries affected by leprosy, consists of:

Dr. R. Chaussinand, consultant on leprosy to WHO and secretary of the Committee; Dr. Dharmendra, of Calcutta; Dr. John Lowe, of Uzuakoli, Nigeria; Dr. Vicente Pardo-Castelló, of Havana; Dr. José N. Rodríguez, of Manila; Dr. Lauro de Souza Lima, of São Paulo; and Dr. H. W. Wade, of Cullion, Philippines. Also to participate are Dr. E. Muir, of London, general secretary of the International Leprosy Association, and Drs. Ernani Agricola, of Rio de Janeiro, and Nelson de Souza Campos, of São Paulo, as co-opted observers.

The following provisional agenda has been announced:

1. Epidemiology of leprosy. (1.1) Contagiousness of the various forms of leprosy. (1.2) Results of bacteriological examination of healthy contacts of lepers.
2. Prophylaxis of leprosy. (2.1) Prophylaxis of leprosy through BCG vaccination.
3. Treatment of leprosy. (3.1) Therapeutic potency of various drugs. (3.2) Physiotherapeutic, surgical and orthopaedical treatment of lepers.
4. Control of leprosy. (4.1) Basic principles of leprosy control. (4.2) Mass campaigns in limited areas. (4.3) Administrative methods and personnel suitable for leprosy campaigns.
5. Immunology of leprosy. (5.1) Standardization of lepromin and of the lepromin test.
6. Classification of leprosy. (6.1) Drawing up of a simple and generally acceptable classification based primarily on clinical signs. (6.2) Significance of histopathological examinations.
7. Other business.

ORGANIZATIONS AFFILIATED WITH THE INTERNATIONAL
LEPROSY ASSOCIATION

British Empire Leprosy Relief Association, 167 Victoria Street, London, S.W.1, England. (Affiliated October 1948.)

The Mission to Lepers, 7 Bloomsbury Square, London, S.W.1. (Affiliated October 1948.)

American Leprosy Missions, Inc., 156 Fifth Avenue, New York 10, N. Y., U. S. A. (Affiliated November 1948.)

Hind Kusht Nivaran Sangh, 20 Talkatora Road, New Delhi, India. (Affiliated November 1948.)

Federação das Sociedades de Assistência Aos Lazáros e Defesa Contra a Lepra, Rio de Janeiro, Brazil. (Affiliated November 1948.)

Patronato de Leprosos de la Republica Argentina, J. E. Uriburu 1018, Buenos Aires, Argentina. (Affiliated November 1948.)

Société contre la Lèpre de Meshed, 1777, rue de Paris, Teheran, Persia. (Affiliated October 1949.)

Associação Brasileira de Leprologia, Rua Washington Luiz, 13, Rio de Janeiro, Brazil. (Affiliated February 1950.)

Japanese Leprosy Association, c/o Tama-Zensho-en National Leprosarium, Higashi-tama, Tokyo, Japan. (Affiliated August 1951.)

Sociedad Cubana de Leprologia, Manzana de Gomez No. 222, Havana, Cuba. (Affiliated November 1951.)

GEORGE WALTER McCOY

George Walter McCoy, Washington, D.C., died April 2, 1952, aged 75, of coronary thrombosis.

Dr. McCoy was born in Cumberland Valley, Pa., June 4, 1876. He was graduated from the University of Pennsylvania School of Medicine, Philadelphia, in 1898 and two years later joined the U. S. Marine Hospital Service, now the U. S. Public Health Service, becoming a medical director in 1930. He retired from service in 1940 after a long and distinguished career. He was in charge of the U. S. Plague Laboratory in San Francisco from 1908 to 1911. From 1911 to 1915 he was director of the U. S. Leprosy Investigation Station, in Honolulu, serving concurrently as adviser in sanitation to the Hawaiian Government. In 1915 he became director of the Hygienic Laboratory of the Public Health Service, now known as the National Institute of Health. On concluding his service with the institute in 1937, Dr. McCoy engaged himself in epidemiologic studies in leprosy and in 1938 became director of the department of preventive medicine and public health at the Louisiana State University School of Medicine, New Orleans, where he served until 1947 when he became professor emeritus. In 1945-1946 he was acting dean of the university.

Dr. McCoy was a member of the American Medical Association (since 1916 a member of the Council on Pharmacy and Chemistry), the American Society of Tropical Medicine, the American Association of Pathologists and Bacteriologists, and various other such organizations; in 1935 he was president of the Washington (D.C.) Academy of Science. For many years he was an honorary vice-president of the American Mission to Lepers. Since 1920 had been a member of the U. S. Pharmacopeia Revision Committee. As a member of the Committee for the Protection of Medical Research of the American Medical Association for more than twenty years he provided congressional committees with information on bills introduced by antivivisectionists and antivaccinationists.

The study of leprosy was a lifelong interest of Dr. McCoy. While his contributions to the literature included numerous papers on bacteriology and public health subjects, they reflected a special interest in plague and leprosy. In 1933 he was a member of a board to study the existing facilities for

the care and treatment of leprosy persons in Hawaii, and, in 1937, on his retirement as director of the National Institute of Health, he was assigned by the Public Health Service to make a study of the disease in the Continental United States and the island possessions. In 1937 he delivered the second Charles Franklin Craig Lecture at the American Society of Tropical Medicine on "The History of Leprosy in the United States." Dr. McCoy had represented his country on the Permanent Standards Commission of the Health Section of the League of Nations from 1922 to 1937, and later served as a member of an advisory committee to the National Foundation for Infantile Paralysis. In 1931 he was awarded the Sedgwick Memorial Medal of the American Public Health Association.— [From an obituary note in the *J. American Med. Assoc.* **148** (1952) 1519.]