LEPROSY NEWS AND NOTES

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

SIXTH INTERNATIONAL CONGRESS OF LEPROSY

SPONSORED BY THE GOVERNMENT OF SPAIN
WITH THE COLLABORATION OF THE
INTERNATIONAL LEPROSY ASSOCIATION

With Financial Aid by the
Council of International Organizations of Medical Sciences

HELD IN MADRID, OCTOBER 3 TO 11, 1953

NATIONAL ORGANIZING COMMITTEE

Honorary President

S. E. Don Francisco Franco Bahamonde, Chief of State.

Honorary Members

Excmo. Sr. D. Blas Pérez Gonzales, Minister of the Interior.
Excmo. Sr. D. Alberto Martin Artajo, Minister of Foreign Affairs.
Excmo. Sr. D. Joaquin Ruiz-Jiménez, Minister of National Education.
Excmo. Sr. D. José Girón de Velasco, Minister of Labor.
Excmo. Sr. D. Gabriel Arias Salgado, Minister of Information and Tourism.
Excmo. Sr. D. Luis Garcia de Llerá. Director General of Cultural Relations.
Excmo. Sr. D. José Diaz de Villegas, Director of Morocco and Colonies.
Excmo. Sr. D. Fernando Coca de la Piñera, Director General of Social Welfare.
Excmo. Sr. D. Leopoldo Eijo y Garay, Bishop of Madrid-Alcalá and Patriarch of the Indies.
Excmo. Sr. D. Carlos Ruiz Garcia, Civil Governor of Madrid.
Excmo. Sr. Conde de Mayalde, Mayor of Madrid.
Excmo. Sr. Marques de la Valdavia, President of the Provincial Deputation of Madrid.
Excmo. Sr. D. Agustin Aznar Gerner, National Delegate of Health, Falange Española Tradicionalista.

Excmo. Sr. D. Pedro Lain Entralgo, Rector of the University of Madrid.
Excmo. Sr. D. Luis Martinez Kleiser, President, Patronato Social Antileproso.
Ilmo. Sr. D. Jesus Garcia Orcoyen, Dean of the Faculty of Medicine of Madrid.
Ilmo. Sr. D. Alfredo Sánchez Belda, Director, Instituto de Cultura Hispánica.
Ilmo. Sr. D. Antonio Crespo Alvarez, President, Consejo General de Colegios Médicos.
Dr. D. José Velasco Pajares, President, Colegio de Médicos de Madrid.

Active Members

Chairman: Dr. José A. Palanca.
General Secretary: Dr. Félix Contreras Dueñas.
Treasurer: Mr. Manuel Amblés Pipo.
Assistant Secretaries: Dr. Luis Alvarez Lowell, Dr. Julio Brava Sanfelíu, Dr. Antonio García Pérez, Dr. Javier Guillén Prats, Dr. Gerardo Jaqueti del Pozo, and Dr. Julio Rodriguez Puchol.
Members: Dr. Enrique Alvarez y Sáinz de Aja, Dr. Gerardo Clavero del Campo, Dr. Antonio Cordero Soroa, Dr. José Gay Prieto, Dr. José Gómez Orbaneja, Dr. Victor Martinez Dominguez, Dr. Manuel Such Sanchez, and Dr. Xavier Vilanova Montíu.

INTERNATIONAL LEPROSY ASSOCIATION

President: Dr. H. W. Wade.
Vice Presidents: Dr. Dharmendra and Dr. H. C. de Souza-Araujo.
General Secretary-Treasurer: Dr. E. Muir.
General Councillors: Dr. Ernani Agricola, Dr. C. J. Austin, Dr. R. Chaussinand, Dr. R. G. Cochrane, Dr. Felix Contreras, Dr. A. E. Davison, Dr. A. Dubois, Dr. N. D. Fraser, Dr. F. A. Johansen, Dr. Fernando Latapi, Dr. A. Oteiza Setien, and Dr. J. N. Rodriguez.

ORGANIZATION OF THE CONGRESS

Offices, Congress Council and Executive Committee.—The General Council of the Congress was, as usual, composed of members of the Organizing Committee and those of the Councils of the International Leprosy Association who were present.

There being twelve of the latter group, besides Dr. Felix Contreras who was on both groups, the former one chose twelve others of its members to serve on the Council, making a total of twenty-five members. By previous agreement four members of this body were chosen to serve as the general officers of the Congress. The Executive Committee, which was immediately responsible for the operation of the sessions, was composed of seven members of this group. The work of the registration office and other administrative functions were entirely in the hands of the local organizing group, Dr. Felix Contreras in immediate charge. The lists of these groups follow.

GENERAL OFFICERS

Dr. José A. Palanca, *President*
Dr. H. W. Wade, *Vice-President*
Dr. E. Muir, *Secretary*
Dr. Felix Contreras, *Vice-Secretary*

GENERAL COUNCIL

Dr. José A. Palanca, (*Chairman*)
Dr. Felix Contreras (*Vice-Secretary*)
Dr. E. Alvarez y Sáinz de Aja
Dr. L. Alvarez Lowell
Dr. A. Cordero Soroa
Dr. J. Gay Prieto
Dr. D. Gerardo Cordero
Dr. J. Goméz Orbaneja
Dr. G. Jaqueti
Dr. V. Martinez Dominguez
Dr. J. Rodriguez Puchol
Dr. M. Such Sanchez
Dr. X. Vilanova Montíu
Dr. H. W. Wade (*Vice-Chairman*)
Dr. E. Muir (*Secretary*)
Dr. E. Agricola
Dr. R. Chaussinand
Dr. R. G. Cochrane
Dr. A. R. Davison
Dr. A. Dubois
Dr. Fernando Latapí
Dr. John Lowe
Dr. José N. Rodriguez
Dr. H. C. de Souza-Araujo
Dr. Martin Vegas

EXECUTIVE COMMITTEE

Dr. H. W. Wade (*Chairman*)
Dr. José Gay Prieto (*Vice-Chairman*)
Dr. E. Muir (*Secretary*)
Dr. Felix Contreras (*Vice-Secretary*)
Dr. E. Agricola
Dr. R. Chaussinand
Dr. J. Lowe

Other Committees.—(*a*) A Program Committee, composed of Drs. Wade and Muir, with other members of the Executive Committee in consultation, served to classify the papers submitted by authors attending the meeting, and where more than one had been submitted arranged with each author concerned—when he could be reached—which one should be included in the

session programs under the rules which were established. (*b*) After the closure the same persons served as an Editorial Committee, with the volunteer collaboration of several other members of the Congress, to edit the reports of the Technical Committees and especially to make sure that the translated editions agreed with the original reports submitted by the commitees. (*c*) For the technical committees, nominations were presented by the General Council to the first plenary session, where other names were added. (The memberships of these committees, together with co-opted members added by them, are given as footnotes to their reports.) It was agreed that Dr. Mario Giaquinto, serving as Observer for the World Health Organization, might sit in with any of these committees.

The Executive Committee held its first meeting on Wednesday, September 30th. The General Council met on Saturday, October 3rd, to consider proposals to be put before the first plenary session on Monday, the 5th, and other matters. On Friday, October 9th, the reports of the Technical Committees were received and scanned by the Executive Committee, and on the following morning they were referred to the General Council, which scrutinized them before referring them to the final plenary session held that afternoon.

PROGRAM OF THE CONGRESS

(Except when otherwise stated, the events listed below occurred at the Congress headquarters, at the Escuela de Estomatología in University City.)

SATURDAY, 3RD OCTOBER

10 A. M. Registration.

12 Noon. Reception, courtesy of the Dean and the members of the Faculty of Medicine, Madrid.

5 P. M. Formal opening ceremony, at the Consejo Superior de Investigaciones Científicas Dr. José A. Palanca, presiding.

Speakers: Dr. Felix Contreras, representing the Organizing Committee; Dr. H. W. Wade, representing the International Leprosy Association; Dr. Dario Maldonado, for the Spanish-speaking members; Dr. A. Dubois, for the French-speaking members; Dr. John Lowe, for the English-speaking members; Dr. Augusto Salazar Leite, for the Portuguese-speaking members; and Dr. Mario Giaquinto, representing the World Health Organization. An address by Dr. Palanca concluded the ceremony.

SUNDAY, 4TH OCTOBER

Visit to Toledo, with lunch at the Venta de Aires restaurant, courtesy of H. E. the Minister of Labor. Entertainment of Spanish choruses and dances.

MONDAY, 5TH OCTOBER

10 A. M. Inaugural plenary session. First working session (following the plenary session). Treatment. Dr. Mario Hugo Ladeira, *chairman.*

1 P. M. Reception, courtesy of the General Administration of Cultural Relations of the Ministry of Foreign Affairs.

4 P. M. Second working session. Treatment (continued). Dr. Paulo Cerqueira Pereira, *chairman;* Dr. G. Bertaccini, *secretary.*

11 P. M. Gala function, at the Teatro Español. Program of Spanish music, by the Philharmonic Orchestra of Madrid.

TUESDAY, 6TH OCTOBER

9 A. M. Third Working Session. Immunology. Dr. J. Ramos e Silva, *chairman;* Dr. R. D. Azulay, *secretary.*

1:30 P. M. Visit to the Institute of Industrial Medicine, Ministry of Labor, University City.

5 P. M. Reception by H. E. the Mayor of Madrid, in the gardens of the Retiro. Performance of Spanish dances.

10:30 P. M. Moving pictures, exhibits of members of the Congress, at the Cine Amaya.

WEDNESDAY, 7TH OCTOBER

9 A. M. Fourth working session. Various topics. Dr. R. G. Cochrane, *chairman;* Dr. J. A. K. Brown, *secretary.*

4 P. M. Fifth working session. Various topics (continued). Dr. H. T. Karsner, *chairman;* Dr. Reidar Melsom, *secretary.*

4 P. M. Visit to the Preventorium "Niño Jesus del Remedio," at Chapineria, for members especially interested in the care of children of leprous parents.

THURSDAY, 8TH OCTOBER

Visit to the National Leprosarium at Trillo, stopping en route at the Residencia Sanitaria (Ministry of Labor) at Guadalajara. Clinical session at the leprosarium, and luncheon tendered by H. E. the Minister of the Interior.

FRIDAY, 9TH OCTOBER

9 A. M. Sixth working session. Epidemiology and control.

Dr. Antonio Cordero Soroa, *chairman;* Dr. Martin Vegas, *secretary.*

1 P. M. Visit to the plant of the Compañía Española de la Penicilina y Antibióticos; luncheon.

4 P. M. Seventh working session. Epidemiology and control (continued). Dr. J. A. Doull, *chairman;* Dr. A. R. Davison, *secretary.*

Same, continuation. Social Aspects. Dr. Salazar Leite, *chairman;* Sra. Carmen de Cavestany, *secretary.*

SATURDAY, 10TH OCTOBER

9 A. M. Eighth working session. Classification and miscellaneous. Dr. T. F. Davey, *chairman;* Dr. P. Laviron, *secretary.*

4 P. M. Final plenary session.

6 P. M. Closing ceremony, presided over by H. E. the Minister of the Interior.

8:30 P. M. Cocktail party, at the Palacio de Viana, tendered by H. E. the Minister of Foreign Affairs.

10 P. M. Closing banquet and dance, at the Hotel Castellana-Hilton.

SUNDAY, 11TH OCTOBER

10 A. M. General Meeting of the International Leprosy Association.

4. P. M. Departure for a visit to the "Colonia-Sanatoria San Francisco de Borga" at Fontilles, Alicante.

(Later in the week, the Antibióticos Schenley, S. A., provided for a trip to their plant in Léon City.)

MEMBERS OF THE CONGRESS

The following list of members of the Congress, supplied by the administration secretariat, comprises 337 persons. It does not include the many "adherent" members, wives of members and others who registered as such in order to attend the social events. It does, however, include a certain number of names of persons who, because the Organizing Committee asked for advance payment of the registration fee, sent the money but were not able actually to attend the meeting. In no respect was any distinction made, as was done at Havana in 1948, between official delegates, institutional delegates, and private members.

Agricola, Dr. Ernani, Rio de Janeiro, Brazil.
Aleixo, Dr. Josefino, Belo Horizonte, Brazil.
Alexander-Jackson, Dr. Eleanor, New York, U. S. A.
Alvarez Alvarez, Dr. Quintiliano, Madrid, Spain.

Alvarez Cascos, Dr. Manuel, Madrid, Spain.
Alvarez Lowell, Dr. Luis, Madrid, Spain.
Alvarez Sáinz de Aja, Dr. Enrique, Madrid, Spain.
Ambles Pipo, Dr. Manuel, Madrid, Spain.
Ambrossetti, Dr. Felix, Buenos Aires, Argentina.
Antunez, Dr. Almi Gusmão, Rio de Janeiro, Brazil.
Anwar, Dr. Chaura, Syria.
Aparisi Jijon, Dr. Tomás, Valencia, Spain.
Aramburu, Sr. Elena, Sevilla, Spain.
Arguello Pitt, Dr. Luis, Córdoba, Argentina.
Arnold, Dr. Harry L., Jr., Honolulu, U. S. A.
Arzevedo, Dr. João Garcia, Belo Horizonte, Brazil.
Arztin, Dr. Sylvia Richwein, Marne/Holstein, Germany.
Azúa Dochao, Dr. Luis, Zaragoza, Spain.
Azulay, Dr. Rubem David, Rio de Janeiro, Brazil.

Balbi, Dr. Eduardo, Alessandria, Italy.
Barrio de Medina, Dr. José, Madrid, Spain.
Basombrío, Dr. Guillermo, Buenos Aires, Argentina.
Basset, Dr. André, Paris, France.
Bechelli, Dr. Luis Marino, São Paulo, Brazil.
Beltrán Alonso, Dr. Antonio, Jaén, Spain.
Berengena del Rey, Dr. Antonio, Jerez de la Frontera, Spain.
Bertaccini, Dr. Guiseppe, Bari, Italy.
Blanc, Dr. Michel, Cameroun, Africa.
Blanco Bueno, Dr. Tomás, Madrid, Spain.
Blenska, Dr. Wanda, Buluba, Uganda.
Boned Merchan, Dr. Aurelio, Madrid, Spain.
Bonmatí Azorin, Dr. Casimiro, Cartagena, Spain.
Bosch Marin, Dr. Juan, Madrid, Spain.
Braga, Dr. Renato Pacheco, São Paulo, Brazil.
Braga de Castro, Dr. Augusto, Lisbon, Portugal.
Bravo M., Dr. Augusto, Tucumán, Argentina.
Bravo Sanfelíu, Dr. Julio, Madrid, Spain.
Brechet, Dr. Rodolpho, Angola, Africa.
Broekert, Dr. W. de, Gouda, Holland.
Brown, Dr. J. A. Kinnear, Entebbe, Uganda
Buker, Dr. Richard, Chiengmai, Thailand.
Buu-Hoi, Dr. N. P., Paris, France.
Burgess, Mr. Perry, Geneva, Ohio, U. S. A.
Burgess, Mrs. Perry, Geneva, Ohio, U. S. A.
Bushby, Dr. S. R. M., Bekenham, Kent, England.

Cabré Claramut, Dr. José, Barcelona, Spain.
Cañadas, Dr. Julio, Cadiz, Spain.
Candelon, Dr. Periqueux, France.
Cantó Ibañez, Dr. Francisco, Castellón, Spain.
Carda Lopez, Dr. Pedro, Madrid, Spain.
Carboni, Dr. Eduardo A., Rosario, Argentina.
Cardenas Gutierrez, Dr. Benito, Huelva, Spain.
Carreras, Dr. José Luis, Buenos Aires, Argentina.
Carreras Verdaguer, Dr. Antonio, Barcelona, Spain.
Carvalho, Dr. Adelberto Tolentino de, Rio de Janeiro, Brazil.

Carvalho, Dr. José Correa de, São Paulo, Brazil.
Cattaneo, Dr. Luigi, Milan, Italy.
Chaoukat Chatti, Dr., Syria.
Chaussinand, Dr. R., Paris, France.
Chico, Dr. Enrique, Madrid, Spain.
Chover Madramay, Dr. Placido, Valencia, Spain.
Clavero del Campo, Dr. Gerardo, Madrid, Spain.
Cochrane, Dr. Robert G., London, England.
Cohen, Dr. Adele, New Jersey, U. S. A.
Cole, Dr. Howard I., Oregon, U. S. A.
Concha y Venagas, Dr., Bogota, Colombia.
Conejo Mir, Dr. José, Sevilla, Spain.
Contreras Dueñas, Dr. Felix, Madrid, Spain.
Convit, Dr. Jacinto, Caracas, Venezuela.
Cordero Soroa, Dr. Antonio, Madrid, Spain.
Coursier-Risler, Dr., Paris, France.
Cruz Sobral, Dr. Francisco da, Lisbon, Portugal.
Curiel Thompson, Dr. Oscar, Venezuela.

Dauden Salas, Dr. Carlos, Madrid, Spain.
Dauden Valls, Dr. Francisco, Madrid, Spain.
Davey, Dr. T. F., Lagos, Nigeria.
Davison, Dr. A. R., Pretoria, South Africa.
Destombes, Dr. P., Saigon, Indo-China.
Diaz Lopez, Dr. Nazario, Madrid, Spain.
Diniz, Dr. Orestes, Belo Horizonte, Brazil.
Dominguez Lópes, Dr. Francisco, Camaguey, Cuba.
Doull, Dr. James A., Washington, U. S. A.
Dreisbach, Dr. John A., Nigeria.
Dubois, Dr. Albert, Antwerp, Belgium.
Duperrat, Dr., Paris, France.
Duverne, Dr. J., Loire, France.

Egea Bueno, Dr. Luis, Granada, Spain.
Ehnbom, Miss Ester J., Banza Manteke, Belgian Congo.
Estaun Llanas, Dr. Agustin, Huesca, Spain.
Esteller Luengo, Dr. José, Valencia, Spain.
Estrada Silos, Dr. Maria Concepción, Mexico City, Mexico.

Falcão, Dr. Jorge, Estoril, Portugal.
Fegeler, Dr. Ferdinand, Münster, Germany.
Fernandez, Dr. José M. M., Rosario, Argentina.
Fester, Mrs. Robert, Antwerp, Belgium.
Floch, Dr. Hervé, Cayenne, French Guiana.
Forgan, Dr. Robert, Common, Essex, England.
Francis, Dr. Thomas, Jr., Ann Arbor, Michigan, U. S. A.
Franco, F., Dr. Roberto, Bogotá, Colombia.

Gabbai, Dr. Alberto, Pont St. Esprit, France.
Gallego, Dr. José Luis, Barcelona, Spain.
Gallego Burin, Dr. Marino, Granada, Spain.
Galvez Molina, Dr. Luis, Guatemala.
Gandy, Dr. Truett, Texas, U. S. A.

Garcia, Dr. Gabino, Oviedo, Spain.
Garcia Boente, Dr. José Luis, Orense, Spain.
Garcia Cabenzas, Dr. Juan A., Madrid, Spain.
Garcia Pérez, Dr. Antonio, Madrid, Spain.
Garrod, Dr. J. M. B., Wolverhamton, England.
Garzón, Dr. Rafael, Córdoba, Argentina.
Gasse, Dr. Guillermo, Barcelona, Spain.
Gaté, Dr. Jean, Lyon, France.
Gay Prieto, Dr. José, Madrid, Spain.
Gedge, Dr. C. E., Trinidad.
Giaquinto, Dr. Mario, Geneva, Switzerland.
Gimenez Roldán, Dr. Bernabé, Córdoba, Spain.
Gimeno de Sande, Dr. A., Córdoba, Spain.
Goldenberg, Mr. Bensión, Buenos Aires, Argentina.
Gómez Orbaneja, Dr. José, Madrid, Spain.
González Ferredas, Dr. Manuel, Madrid, Spain.
González Medina, Dr. Ramón, Valencia, Spain.
González Rodriguez, Dr. Pedro, Madrid, Spain.
Gray, Dr. Clarke T., Boston, U. S. A.
Grenierboley, Dr. Jean, Saigon, Indo-China.
Grininger, Dr. George E., Houston, Texas, U. S. A.
Grove-White, Dr. Robert J., Singapore, Malaya.
Guillén Prats, Dr. Javier, Valencia, Spain.
Guinto, Dr. Ricardo S., Cebu, Philippines.
Gyorko, Dr. Alejandro Carlos, Las Palmas, Spain.

Hale, Dr. J. H., Singapore, Malaya.
Hemerijckx, Dr. Frans, Tshumbe, Belgian Congo.
Henigst, Dr. Wolfgang, München, Germany.
Hernaiz Barragan, Dr. José Esteban, Madrid, Spain.
Hernandez Alvarez, Dr. Rafael, Santa Cruz, Spain.
Hobby, Dr. Gladys, New York, U. S. A.
Hodgkinson, Dr. Robert, Middlesex, England.
Horta, Dr. Antonio Carlos, Belo Horizonte, Brazil.
Huffman, Dr. Marquis R., Tetuan, Spanish Morocco.
Humboldt Barrero, Dr. Ferdin, La Pas, Bolivia.
Hutton-Mills, Dr. I., Gold Coast.

Iglesia, Dr. Manuel Hipolito, Corrientes, Argentina.
Innes, Dr. J. Ross, Nairobi, Kenya.
Ishidate, Dr. Morizo, Tokyo, Japan.

Jaen Frean, Dr. José Maria, Ubeda, Jaén, Spain.
Jaqueti del Pozo, Dr. Gerrardo, Madrid, Spain.
Jardin, M. J. Claude-Marie, Bamako, French West Africa.
Jimenez Jimenez, Dr. Juan, Madrid, Spain.
Jordan, Dr. Paul, Münster, Germany.
Joulia, Dr. N., Bordeaux, France.

Karsner, Dr. Howard T., Washington, U. S. A.
Katcharoglu, Dr. Rachid, Istanbul, Turkey.
Kellersberger, Dr. Eugene, New York, U. S. A.
Khanolkar, Dr. V. R., Bombay, India.

Kitamura, Dr. Kanehiko, Tokyo, Japan.
Klingmüller, Dr. Georg, Bonn, Germany.
Kuwada, Dr. Satoro, Osaka, Japan.

Ladeira, Dr. Mario Hugo, Belo Horizonte, Brazil.
Lanza, Dr. Francisco, Faes, Italy.
Laserna Robledo, Dr. Julio, Bogota, Colombia.
Latapí, Dr. Fernando, Mexico City, Mexico.
Lavalle Aguilar, Dr. Pedro, Mexico City, Mexico.
Lavirón, Dr., Bamako, French West Africa.
Leclerc, Dr. M. R., Schaffhouse, Switzerland.
Leitao, Dr. Arturo Barbosa, Coimbra, Portugal.
Leite, Dr. Augusto Salazar, Lisbon, Portugal.
Lengauer, Dr. L., Nigeria.
Lenzano Meirás, Dr. Victoriano, Madrid, Spain.
Lew, Dr. Joon, Los Angeles, U. S. A.
Limañana López, Dr. Pascual, Las Palmas, Spain.
Littann, Dr. Karl Ernst, Heidelberg, Germany.
Loes, Dr. José Rodriguez, Belo Horizonte, Brazil.
Lohe, Dr., Berlin-Grunwald, Germany.
Loon, Dr. A. M. M., Rotterdam, Holland.
López Martinez, Dr. Bernardo, Cádiz, Spain.
López Villafuertes, Dr. Antonio, Madrid, Spain.
Lowe, Dr. John, Nigeria.
Lucena, Dr. Carlos Eduardo, Rosario, Argentina.

Madaria Garriaga, Dr. José, Alicante, Spain.
Maldonado Romero, Dr. Dario, Bogotá, Colombia.
Mañeru Bago, Dr. Jenaro, San Sebastian, Spain.
Marie-Suzanne, Sister, Lyón, France.
Markson, Dr. Leonard S., Milwaukee, U. S. A.
Martín Caloto, Dr. Manuel, Madrid, Spain.
Martinez Domingues, Dr. Victor, Micomeseg, Spanish Guinea.
Martinez Higuera, Dr. Juan, Ceuta, Spanish Morocco.
Martinez Navarro Zanón, Dr. Antonio, Valencia, Spain.
Mary Magdalen, Sister, Jamaica.
Mauzé, Dr. Jean, Pointe-à-Pitre, Guadeloupe.
Mayor, Dr. Federico, Madrid, Spain.
Mayor, Dr. Eduardo Paulo Soto, Angola.
McKelvie, Dr. Alasdair, Elmina, Gold Coast.
Meister, Dr. Klaus, Germany.
Melsom, Dr. Reidar, Bergen, Norway.
Mendez Martín, Dr. Julian, Salamanca, Spain.
Menieux, Dr. Charles, Lyón, France.
Mercadal Peyri, Dr. J., Barcelona, Spain.
Merklen, Dr. J., Paris, France.
Merland, Dr. Réné, Manankavaly, Madagascar.
Mertens, Dr. Anton, Leverkusen, Germany.
Mesquita, Dr. S. J. Bueno, Paramaribo, Surinam.
Miller, Mr. A. Donald, London, England
Miró Carbonell, Dr. Julio, Valencia, Spain.
Molesworth, Dr. B. David, Selangor, Malaya.

Molina Garcia, Dr. Manuel, Santiago de Compostela, Spain.
Molina Martín, Dr. Ricardo, Madrid, Spain.
Molinero Manrique, Dr. Jesús, Madrid, Spain.
Møller-Christensen, Dr. V., Roskilde, Denmark.
Montalt Brú, Dr. J., Valencia, Spain.
Montel, Dr. M. L. R., Paris, France.
Montero Tirado, Dr. José, Madrid, Spain.
Montestruc, Dr. Etienne, Fort de France, Martinique.
Morán Palacios, Dr. Francisco, Trillo, Guadalajara, Spain.
Morán Pinazo, Dr. Manuel, Trillo, Guadalajara, Spain.
Morgado, Dr. José Rui, Lisbon, Portugal.
Morris, Dr. C. W. J., Nigeria.
Moura Catidio, Dr. Walter de, Rio de Janeiro, Brazil.
Moura Costa, Dr. Henrique de, Rio de Janeiro, Brazil.
Muck, Dr. Floyd E., Nyankanda, Belgian Congo.
Mudrow-Reichenow, Dr. Lilly, Wupertal, Elberfield, Germany.
Muir, Dr. E., Wembley, England.
Mungavin, Dr. J. M., Manchester, England.
Muñoz Rivas, Mr. Guillermo, Bogotá, Colombia.
Mussacchio, Dr. Raul E., Sante Fé, Argentina.
Musso, Dr. L. A., Penshurst, Australia.
Mut Mut, Dr. Tomás, Gandía, Valencia, Spain.

Nassif, Dr. Salim Jorge, Rio de Janeiro, Brazil.
Navarro de Borrel, Sra. Florinda, Havana, Cuba.
Navarro Martín, Dr. A., Santander, Spain.
Neuhauser, Dr. Irene, Chicago, Illinois, U. S. A.
Noêl, Dr. R., Lyón, France.
Noguer Moré, Dr. Santiago, Barcelona, Spain.
Noussitou, Dr. Fernando, Buenos Aires, Argentina.
Nowotny, Dr. Richard, Madrid, Spain.
Nudemberg, Dr. Alberto, Rosario, Argentina.
Nuñez Andrade, Dr. Roberto, Mexico City, Mexico.
Nuñez Magro, Dr. Manuel, Madrid, Spain.

Ochando González, Dr. Manuel, León, Spain.
Olivares Baqué, Dr. Carlos, Zaragosa, Spain.
Olmos Castro, Dr. Norberto, Tucumán, Argentina.
Orsini de Castro, Dr. Olyntho, Belo Horizonte, Brazil.
Orusco Hernando, Dr. Marino, Madrid, Spain.

Palanca Martinez Fortún, Dr. José A., Madrid, Spain.
Palomo de Pavón, Dr. Isabel, Mexico City, Mexico.
Pardo Castelló, Dr. Vicente, Havana, Cuba.
Pardo Valcarcel de Cavestany, Sra. Carmen, Madrid, Spain.
Parry, Dr. Thayer L., Ohio, U. S. A.
Pastor Krauel, Dr. Eugenio, Madrid, Spain.
Pastorino Manca, Dr. Vicenzo, Sassari, Italy.
Payá Díaz, Dr. Francisco, Linares, Jaén, Spain.
Pereira, Dr. Antonio Carlos, Juiz de Fora, Minas Gerais, Brazil.
Pereira, Dr. Paulo Cerqueira Rodriques, Belo Horizonte, Brazil.
Perez de Olaguer, Mr. Antonio, Barcelona, Spain.
Pessoa Mendez, Dr. José, Rio de Janeiro, Brazil.

Petronici, Dr. Giorgio, Palermo, Italy.
Pflimlin, Dr. Raoul, Zurich, Switzerland.
Pimentel, Dr. Melquiades A., Madrid, Spain.
Piñerua, Dr. Oscar, Madrid, Spain.
Pino Báez, Dr. Jesús del, Madrid, Spain.
Pinna Lopo, Dr. Fernando, Badajoz, Spain.
Portugal, Dr. Hildebrando Marcondes, Rio de Janeiro, Brazil.

Quagliato, Dr. Renato, Rio de Janeiro, Brazil.
Quiñones Caravia, Dr. Pedro A., Madrid, Spain.
Quiroga, Dr. Marcial I., Buenos Aires, Argentina.

Rabello, Dr. Francisco Eduardo, Rio de Janeiro, Brazil.
Ramirez C., Dr. Oswaldo, San Salvador, El Salvador.
Ramos e Silva, Dr. J., Rio de Janeiro, Brazil.
Reichenow, Dr. Eduard, Hamburg, Germany.
Rendón Guerra, Dr. Luis, Quito, Ecuador.
Ribas Valero, Dr. Ramón, Sevilla, Spain.
Richet, Dr. Pierro K., Brazzaville, A. E. F.
Rios, Dr. Federico S., Asunción, Paraguay.
Riou, Dr. Maurice, Paris, France.
Risco González, Dr. Antonio, Valladolid, Spain.
Robles Baonza, Mr. Gerardo, Trillo, Guadalajara, Spain.
Rodrigo Abad, Dr. Manuel, Madrid, Spain.
Rodriguez, Dr. Obdulia, Mexico City, Mexico.
Rodriguez, Dr. José N., Manila, Philippines.
Rodriguez Puchol, Dr. Julio, Madrid, Spain.
Rollier, Dr. Réné, Casablanca, French Morocco.
Romañá, Rev. Fr. Fontilles, Alicante, Spain.
Romero de Juseu, Dr. José, Madrid, Spain.
Ross, Sister Hilary, Carville, Louisiana, U. S. A.
Rossas, Dr. Tomáz Pompeu, Rio de Janeiro, Brazil.
Rotberg, Dr. Abrahão, São Paulo, Brazil.
Rousset, Dr. J., Lyón, France.
Ruiz, Dr. Niceso, Valladolid, Spain.
Rule, Dr. William, Mwena Ditu, Belgian Congo.

Saenz, Dr. Braulio, Havana, Cuba.
Sagher, Dr. Felíx, Jerusalem, Israel.
Saliba, Dr. Nagib, Belo Horizonte, Brazil.
Salomão, Dr. Abrahão, Belo Horizonte, Brazil.
San Juan Nadel, Dr. Honorario, Barcelona, Spain.
Sanz, Dr. Huberto, Murcia, Spain.
Scheidt, Dr. Ary, Piraquaro, Paraná, Brazil.
Schroeder, Dr. Karl, Lauenberg, Germany.
Schujman, Dr. Salomón, Rosario, Argentina.
Senra Calvo, Dr. Jesús, San Sebastian, Spain.
Seoane Laredo, Dr. Manuel, Buenos Aires, Argentina.
Serra E., Dr. Juan Batista, Rosario, Argentina.
Serra Garcia, Dr. Emilio, Madrid, Spain.
Silvia, Dr. Manuel Santos, Tocha, Coimbra, Portugal.
Sloan, Dr. Norman R., Hawaii, U. S. A.
Soballa, Dr. Adalbert, Braunscheweig, Germany.

Solla Casalderrey, Dr. Laureano, Vigo, Pontevedra, Spain.
Souza-Araujo, Dr. H. C. de, Rio de Janeiro, Brazil.
Souza Campos, Dr. Nelson de, São Paulo, Brazil.
Souza Lima, Dr. Lauro de, São Paulo, Brazil.
Stricker, Sister Laura, Carville, Louisiana, U. S. A.
Suarez de Puga, Dr. Luis, Guadalajara, Spain.
Such Sanchez, Dr. Manuel, Trillo, Guadalajara, Spain.
Sweeney, Rev. Fr. Joseph, U. S. A.

Terencio, Dr. José, Fontilles, Alicante, Spain.
Tiant, Dr. Francisco R., Havana, Cuba.
Torella, Dr. Enrique, Ciudad Real, Spain.
Touzin, Dr. Robert, Tananarive, Madagascar.
Traversa, Dr. Emanuele, Rome, Italy.
Trincão, Dr. Mario Simoes, Coimbra, Portugal.
Turégano F., Dr. José, Madrid, Spain.

Umbert Torrescasana, Dr. Enrique, Barcelona, Spain.
Urrutia, Dr. José Maria Victoria, Alava, Spain.
Utrilla Dominguez, Dr. Antonio, Madrid, Spain.

Vegas, Dr. Martín, Caracas, Venezuela.
Vidal Jordana, Dr. Javier, Valencia, Spain.
Viette, Dr. Michel, Paris, France.
Vilanova Montíu, Dr. Xavier, Barcelona, Spain.
Vogeli, Dr. Jacques, Paris, France.

Waaler, Dr. Erik, Bergen, Norway.
Wade, Dr. H. W., Culion, Philippines.
Weaver, Mrs. Eunice, Rio de Janeiro, Brazil.
Weilenmann, Dr. Hermann, Schaffhouse, Switzerland.
Weis, Dr. Pedro, Lima, Peru.
Williams, Mrs. Elizabeth S., New York, U. S. A.
Wolcott, Dr. Rolla R., Carville, Louisiana, U. S. A.
Wolf, Dr. Max, New York, U. S. A.
Wolter, Dr. August, Berlin, Germany.

Yanez, Gonzales, Dr. Pedro, Las Palmas, Spain.

Zubiri Vidal, Dr. Antonio, Zaragoza, Spain.

Of the 337 persons listed, 120 were of the host country or its dependencies and 217 were from abroad. The total is over 100 more than were at the Havana Congress in 1948, where there were 226 registrants, 76 Cubans and 150 foreigners. At Cairo, in 1938, the total was 167, of whom 60 were from the host country and 107 from elsewhere. In each instance the local representation was about 35 per cent of the whole.

Countries and territories represented.—The distribution in the foregoing list represents somewhat more than 50 countries

and significant political subdivisions or territories. These are listed below.* This number is essentially the same as that for the Cairo congress (49), and more than for the Havana congress (40).

COUNTRIES AND TERRITORIES

Country or Territory	*Congress Members*
Angola	2
Argentina	19
Australia	1
Belgium	2
Belgian Congo	4
Bolivia	1
Brazil	33
British East Africa	3
Colombia	5
Cuba	5
Denmark	1
Ecuador	1
England	8
France	19
French Guiana	1
French Morocco	1
French West Africa	4
Germany	14
Gold Coast	2
Guadeloupe	1
Guatemala	1
Holland	2
India	1
Indo-China	2
Israel	1
Italy	7
Jamaica	1
Japan	3
Madagascar	2
Malaya	3
Martinique	1
Mexico	6
Nigeria	5
Norway	2
Paraguay	1
Peru	1
Philippines	3
Portugal	8
Salvador	1

* There are more countries in this list than were actually represented by persons at the meeting, because of inclusion of those who registered in advance but did not attend. Australia, Cuba and Peru are known to be included on that basis, and there may be one or two others.

Country or Territory	*Congress Members*
Spain	117
Spanish Guinea	1
Spanish Morocco	2
Surinam	1
Switzerland	4
Syria	2
Thailand	1
Trinidad	1
Turkey	1
Union of South Africa	1
United States of America	25
Venezuela	3
TOTAL	337

Representation of the International Association.—Information regarding the membership of the Association at the time of the Congress is lacking. Comparison of the Congress list with that of the Association membership for 1952 shows that more than 85 persons who were members last year registered at (or for) the Congress. Of the 93 memberships paid up at Madrid, 18 were renewals and 8 were—apparently, since their names are not on the Congress list—paid in their absence, this leaving 67 new members at the Congress. On this basis there were, in total, not less than 150 members present at Madrid.

FORMAL INAUGURAL SESSION

This gathering was held on the afternoon of Saturday, October 5th, in the main auditorium of the Consejo Superior de Investigaciones Cientificas, in Madrid proper. The Honorary Committee and the Diplomatic Corps had been invited to attend. In the absence of the Ministro de la Gobernación, the chair was taken by Dr. José A. Palanca.

The speakers were: Dr. Felix Contreras, for the Organizing Committee; Dr. H. W. Wade, for the International Leprosy Association; Dr. Dario Maldonado Romero, for the Spanish-speaking contingent; Dr. A. Dubois, for the French-speaking contingent; Dr. John Lowe, for the English-speaking contingent; Dr. A. Salazar Leite, for the Portuguese-speaking contingent; and Dr. Mario Giaquinto, for the World Health Organization. After a responsive speech by Dr. Palanca, the Congress was declared convened.

MINUTES OF PREPARATORY MEETINGS

Executive Committee.—A meeting of the—as yet provisional—Executive Committee was held on September 30th, attended by all members then present (Drs. Wade, Gay Prieto, Muir, Contreras and Chaussinand), to consider numerous matters for recommendation to the General Council. These included the organization set-up; the addition of a fifth committee, on Social Aspects, to those originally provided for; tentative selections of members of these committees; the manner of handling the committee reports; the problems posed by the large number of papers that had been sent in; the method of voting in the plenary sessions; and other matters.

Congress Council.—At the first meeting of the Council, held on Saturday, October 3rd, with Dr. Wade serving as Chairman in the absence of Dr. Palanca and with only three other members absent (not yet arrived), the recommendations of the Executive Committee were considered in detail.

The proposals regarding officers and committees were agreed to, with the change of one member of a technical committee.

The decisions of the Executive Committee regarding the problems arising from the number of papers which had been submitted—of necessity already put into force—were approved. So were proposals for handling the reports of the technical committees, both before their submission to the final plenary session and by that meeting.

The decisions referred to were, briefly: That only one paper might be read by any member of the Congress, and that when two papers had been sent in as permitted by the original plan one would have to be "read by title," as would those of registrants who were not present. That more working sessions than provided for in the printed program would have to be arranged for, although they would conflict with other scheduled events. (It was agreed that the titles of papers submitted but not read should be multigraphed and distributed, but that could not be done.) That the time allowed per paper would be ten minutes, and for each person discussing papers two minutes; and that discussions should be of groups of related papers instead of each paper as read.

The proposals regarding the handling of the reports of the technical committees were, first, that they should be handed in to the Executive Committee not later than Friday, the 9th, in

order that they might be examined and multigraphed. On the next day they would be considered by the General Council, which would transmit them to the final plenary session with recommendations.

The final plenary session might, it was proposed, (1) approve a report *in toto,* or (2) reject a report *in toto,* or (3) recommend to the technical committee concerned, through the Executive Committee, any important changes which the session believed should be made. That committee would then be convened to consider the recommendations of the plenary session, but would not necessarily be bound by them. If not adopted, however, such recommendations would be published as an addendum to the report in the Transactions of the Congress and in the *International Journal of Leprosy.*

An important question considered was whether votation in the plenary sessions should be individual, as in the previous congresses, or by national groups, as has been done at Pan-American Conferences. An inquiry previously circulated to the Officers and Councillors of the International Leprosy Association had shown a considerable majority in favor of the latter method. The General Council agreed that that method should be recommended to the plenary session, since it had not been announced as one of the conditions of the Congress.

It was also agreed that selected papers presented at or to the Congress might be published in the *International Journal of Leprosy,* and that the selection of the next place of meeting is properly a function of the International Leprosy Association.

Three agreements of administrative nature were approved, without necessity of their being submitted to the plenary session. These were:

(1) That no distinction should be made among members of the Congress on the basis of their sponsorship, i.e., whether they were official representatives of governments, or represented independent institutions or organizations, or were on a personal basis.

(2) That the local organizing group, which being in charge of administration received all registration fees, should pay the $1.00 fee of the CIOMS for all full members of the Congress, the "auxiliary" members not included.

(3) By previous arrangement, it was required that in order for members of the International Leprosy Association to be entitled to the lower registration fee ($10), their memberships should be registered with the Association not later than September 15th, anyone joining later was to pay the full fee ($20) charged non-members. Reciprocally, it was agreed that for those who paid the latter amount and wished also to join the Association, the administration would turn over to the Association $5 of the fee as dues for one year.

MINUTES OF THE FIRST PLENARY SESSION [1]

This meeting was convened at 10 a.m. on Monday, October 5th, with Dr. Palanca, the President of the Congress, in the chair. (Later, when he had to leave, Dr. Wade took over but was compelled by language difficulties to request Dr. Gay Prieto to take charge.) The agenda followed closely that of the preliminary meetings related above.

The organization set-up as proposed was approved, as were the actions already taken with regard to the limitation of papers to be read and other things.

The personnel of the five technical committees was considered in detail, and names were added to each of them to a total of nine, which it was agreed should be the maximum number. The committees were instructed to elect their own officers and to report them to the Executive Committee. The meetings of these committees would be closed, not open to non-members, but a committee might co-opt a limited number of non-voting members, on notification to the Executive Committee, or might invite others to attend temporarily in order to give information.

The recommendation that Dr. Mario Giaquinto, as Observer for WHO, might sit in at any committee meeting was approved.

The outline programme of the working sessions was accepted, with certain changes in the list of Chairmen and Secretaries.

The proposal that votation should be by national delegations—which, under the circumstances, would apply only to the final plenary session—was voted down.

SECOND MEETING OF THE GENERAL COUNCIL

The second and last meeting of this group was held, with full attendance, at noon on Saturday, October 10th, after the last working session.

The main purpose was to examine the reports of the technical committees, which had been turned in on the previous day but could not be critically scrutinized by the Executive Committee before they had to be multigraphed. Some had been submitted in the two required languages, English and Spanish, but others had had to be translated in the office. Those reports were examined in some detail, except the one on im-

[1] The report of this meeting, and that of the final plenary session, are based on notes made at the time and memory, no stenographic records of the discussions having been made.

munology which had not yet been duplicated, and a second session had to be held after lunch.

A few minor changes were made in the reports on classification and on treatment, but they were either of mere editorial nature or unimportant deletions which could properly be accepted by the members of those committees who were participating in the meeting.

The report on epidemiology and control came under some criticism because of the role accorded BCG vaccination in control, some members feeling that it was given more emphasis than was as yet justified by actual evidence. It was therefore decided to recommend to the final plenary session that that feature be modified.

Other matters considered were certain arrangements for the final plenary session, and the selection of speakers at the banquet to be held that night.

MINUTES OF THE FINAL PLENARY SESSION

This meeting convened at about 4:30 p.m., Saturday, October 10th, with Dr. Palanca in the chair. The principal business was the consideration of the reports of the technical committees. Each was read only in the original language, English or Spanish, multigraphed translations having been provided.

The reports of the Committees on Social Aspects, Therapy and Immunology were adopted with little or no discussion.

Those of the Committees on Epidemiology and Control and on Classification were discussed at some length. A few changes of minor nature were made, accepted by the members of the committees present and did not require formal reference back to the committees as such. Noteworthy is the fact that the proposal of the General Council that less emphasis be given BCG vaccination in control was not approved, and the report was allowed to stand as it was in that respect.

Mr. Perry Burgess presented the resolutions of appreciation, regarding the Congress, which he pointed out had been a thoroughly delightful experience, marked by a spirit of cordiality, good will and friendship—a historical land-mark in medicine.

First mentioned specifically was His Excellency Don Francisco Franco Bahamonde, Chief of State of Spain, whose sympathy and approval had made the holding of the Congress possible. For the parts they had played in the preparation for the Congress, and for their sponsoring of various features of the affair, social and otherwise: to the Minister of the Interior (Ministro de la Gobernación), the Minister of Foreign Affairs, the Minister of National Education, the Minister of Labor, the Minister of In-

formation and Tourism, the Director General of Cultural Relations, the Director General of Morocco and the Colonies, the Director General of Social Welfare, the Civil Governor of Madrid, the Mayor of Madrid, the President of the Provincial Deputation of Madrid, the Rector of the University of Madrid, the Dean of the Faculty of Medicine of Madrid, the President of the Patronato Social Antileproso, and the Director of the Instituto de Cultura Hispánica.

To those who had borne the responsibilities of organizing the Congress and carrying out the scientific and social programs, specifically mention being made of Dr. José A. Palanca, Chairman of the Organization Committee, and Dr. Felix Contreras Dueñas, the General Secretary of the Committee; and also of the officers and councillors of the International Leprosy Association. Thanks were offered to those concerned with the visits to the national leprosarium at Trillo and the Preventorium Niño Jesús de Remedios at Chapinería, as well as the scheduled visit to the leprosarium at Fontilles in Alicante. To the Ladies' Committee, whose President of Honor was Señora Doña Carmen Polo de Franco, and whose active Chairman was Señora Doña Trinidad Bueno de Palanca, which had arranged numerous social activities that had made especially pleasant the visit of foreign ladies accompanying delegates.

Special appreciation was expressed to the Council of International Organizations of the Medical Sciences (CIOMS) for financial aid to the International Leprosy Association in the preliminary organization and for providing for the simultaneous interpretation during the meetings. Certain commercial firms had made it possible for delegates and friends to visit their institutions.

The Government of Spain had made every provision to the end that our stay in its country should be not only profitable but also extremely pleasant.

These expressions of appreciation and gratitude were approved by a rising vote.

The session, prolonged beyond expectation, was interrupted at 6:00 p.m. for the closing formal ceremony. A photograph of the Congress assembly was planned for this period, but had to be foregone.

FORMAL CLOSING SESSION

The formal closing session was held in the auditorium at the Escuela de Estomatologia after the final plenary session, on the afternoon of Saturday, October 10th. The chair was taken by Excmo. Sr. Don Blas Pérez González, Ministro de la Gobernación, substituting for the Chief of State who was unable to attend.

There were two addresses by members of the Congress. Dr. E. Muir reviewed briefly the advances in the treatment and study of leprosy since the Havana Congress, and summarized the work of the present one. Dr. José Gay Prieto spoke on similarly general lines. (Their addresses will appear in full in the Transactions of the Congress.)

The Chairman then formally handed to Dr. Jean Gaté, of Lyon, France; Dr. Francisco E. Rabello, of Rio de Janeiro, Brazil; and Dr. H. W. Wade, of Culion, Philippines, diplomas certifying their election as Academicos Corresponsales of La Real Academia Nacional de Medicina.

The ceremony ended with an address by the Chairman.

TECHNICAL RESOLUTIONS

The reports of the technical committees as adopted by the plenary session of the Congress, with or without modification, follow here. Although upon adoption they became official acts of the Congress itself, it has not been feasible in the editing to change all indications that they were presented to the Congress as recommendations of the individual committees. Three of the reports were submitted in English, the other two in Spanish. The original versions, having precedence, are placed first; the translations to the other language are supposed to conform precisely to the original versions.

CLASSIFICATION [1]

The criteria which bear on the classification of leprosy cases are: (1) clinical, (2) bacteriological, (3) immunological, and (4) histopathological. Existing systems of classification differ with respect to the priority given certain of these criteria.

The Committee agrees unanimously that the basic criteria of primary classification should be clinical, comprising the morphology of the skin lesions and the neurological manifestations. Indispensable in connection with the clinical examination is the bacteriological criterion, involving examination of smears from skin lesions and the nasal mucosa.

In the study of cases full use should be made of the immunological criterion (the lepromin test) and of the histopathology of the lesions. These factors are of value in the determination of types, and may be essential in the determination of subgroups.

The histological examination, though important in the diagnosis of the form of leprosy and consequently in connection

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[1] The Committee on Classification was composed as follows: Dr. H. W. Wade, *chairman*, Dr. José Gay Prieto, *vice-chairman*, Dr. Martín Vegas, *secretary*, and Drs. G. Basombrío, R. G. Cochrane, V. R. Khanolkar, Kanehito Kitamura, Francisco Latapí, and Francisco E. Rabello, *members;* also, Dr. Harry L. Arnold, Jr., *co-opted member*.

with prognosis, should not govern the primary classification, except when, as may happen, it definitely indicates the clinical classification of the case to have been in error. In such instances—if the lepromin reaction is in agreement with the histologic findings—the case should be reclassified.

Cases should be classified according to findings at the time of the examination. They may or may not present evidence, by history or by objective stigmata, of a previous form or phase of evolution, and sometimes these features are significant with respect to present classification.[2] The evidence obtainable may indicate a likelihood of change to another form or phase in the future evolution of the disease, but that factor does not affect the determination of form (as to type or group) until such a change actually occurs.

The Committee considers that this system of classification offers every possibility for further progress.

PRIMARY CLASSIFICATION

The Committee recommends that two distinct *types* of leprosy, lepromatous and tuberculoid, be recognized, thus maintaining the concept of polarity. It also recommends that two *groups* be recognized, indeterminate and borderline (dimorphous).

The following definitions are offered:

Type connotes clinically and biologically stereotyped features, characterized by marked stability and mutual incompatibility.

Group connotes less distinctive or positive characteristics, less stability, and less certainty with respect to evolution.

Variety connotes a subdivision of a type or group.

PROPOSED TYPES, GROUPS AND VARIETIES

Lepromatous type (L)
- Macular
- Diffuse
- Infiltrated
- Nodular
- Neuritic, pure (?) [3]

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[2] For example, it may be known, or be evident from existing stigmata, that a case presenting only simple macules was previously tuberculoid. Such a case should be classified as "residual tuberculoid" and not as "indeterminate."

[3] Cases of this variety have been observed by some workers, but have not as yet been reported in the literature.

Tuberculoid type (T)
- Macular
- Minor tuberculoid (micropapuloid, etc.)
- Major tuberculoid (plaques, annular lesions, etc.)
- Neuritic, pure.

Indeterminate group (I)
- Macular
- Neuritic, pure

Borderline (dimorphous) (B)
- Infiltrated
- (Others?) [4]

LEPROMATOUS TYPE (L)

A malign type, especially stable;[5] strongly positive on bacteriological examination; presenting more or less infiltrated skin lesions; negative to lepromin. The peripheral nerve trunks become manifestly involved as the disease progresses, habitually in symmetrical fashion and often with neural sequelae in advanced stages.

TUBERCULOID TYPE (T)

Usually benign; stable; generally negative on bacteriological examination; presenting in most cases erythematous skin lesions which are elevated marginally or more extensively; positive to lepromin.

Sequelae of peripheral nerve trunk involvement may develop in a certain proportion of cases, and this may give rise to serious and disabling deformity. This frequently appears to occur as a result of extension from or through cutaneous nerve branches, rather than of systemic dissemination, and consequently it is often asymmetric and unilateral.

Tuberculoid leprosy should be subdivided as follows:

Macular tuberculoid (Tm). These cases present macules with clear-cut and definite margins, the surface generally smooth and dry, invariably with some loss of cutaneous sensibility; almost always negative on bacteriological examination, or with at most only a few bacilli.

Minor tuberculoid (micropapuloid, etc.) (Tt). Skin lesions are only slightly to moderately elevated, often only at the margin or even a part of the margin, usually with irregularity of the surface. The condition tends to be relatively superficial, and palpable enlargement of cutaneous nerves associated with the lesions is infrequent.

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[4] See addendum by Drs. Khanolkar and Cochrane.

[5] The word "stable" implies stability as regards the type, not as regards the severity of the disease.

Major tuberculoid (plaques, annular lesions, etc.) (TT). Skin lesions, often smooth of surface, are more markedly elevated and thickened than those of the minor variety, the affected zone usually broader; the more recent lesions may show only partial central recession or no recession. Because of the degree of the condition in the deeper levels of the skin, manifest extension in the associated cutaneous nerves is relatively frequent and marked.

INDETERMINATE GROUP (I)

A benign form, relatively unstable; seldom bacteriologically positive; presenting flat skin lesions which may be hypopigmented or erythematous; the reaction to lepromin negative or positive. Neuritic manifestations, more or less extensive, may develop in cases which have persisted as of this group for long periods. The indeterminate group consists essentially of the "simple macular" cases. These cases may evolve toward the lepromatous type or the tuberculoid type, or may remain unchanged indefinitely.

BORDERLINE (DIMORPHOUS) GROUP (B)

A malign form, very unstable; almost always strongly positive on bacteriological examination; the lepromin reaction generally negative. Such cases may arise from the tuberculoid type as a result of repeated reactions, and sometimes they evolve to the lepromatous type. The nasal mucosa often remains bacteriologically negative, even when the skin lesions are strongly positive.

The skin lesions are usually seen as plaques, bands, nodules, etc., with a regional distribution similar to that of lepromatous leprosy, except for conspicuous asymmetry. The ear lobes are likely to present the appearance of lepromatous infiltration. The lesions frequently have a soft or succulent appearance, and peripherally they slope away from the centre and do not present the clear-cut, well-defined margins seen in the tuberculoid type; they are therefore liable to be mistaken for lepromas. The surface of the lesions is generally smooth, with a shiny appearance and a violaceous hue, sometimes (in light skins) with a brownish (sepia) background.

REACTIONAL PHASES

All forms of leprosy may go through phases of reactivation or reaction. We would particularly draw attention to three main reactional phases of leprosy, as follows:

Reactional lepromatous leprosy.—Two forms must be distinguished:

(1) Lepra reaction (of which there may be two or more varieties) consists essentially of the aggravation of pre-existing skin lesions, usually with fever and extension of the lepromatous process.

(2) Erythema nodosum leprosum is characterized by the appearance of erythematous nodular skin lesions, accompanied at times by fever, and has as a rule a favourable prognosis.

We would further draw attention to the special condition known as the "Lucio phenomenon" or "erythema necrotisans," occurring only in diffuse lepromatous leprosy and more particularly in Central America.

Reactional tuberculoid leprosy.—Infiltrated lesions of active, succulent appearance, without central retrogression, develop abruptly from major tuberculoid lesions or from lesions of lesser degree (minor tuberculoid or even indeterminate), or on sites not previously involved. In some cases more or less numerous and widely scattered small metastatic nodules may appear. The lesions of the peripheral trunk nerves may become marked, and necrosis and even abscess formation may occur. On bacteriological examination, although the cutaneous lesions are found to be positive, sometimes strongly so, the nasal mucosa frequently remains negative. During the reaction the response to lepromin may decrease in intensity. Fever and constitutional symptoms do not ordinarily occur.

Reactional borderline (dimorphous) leprosy.—In reactional borderline cases the lesions show extreme oedema, erythema and desquamation. The reaction frequently extends to nerves, and marked nerve pain and dysfunction develop. The skin lesions, during this phase, may ulcerate superficially, or sometimes widely and deeply; and the skin is acutely tender. Bacteriologically the lesions are strongly positive. The lepromin reaction is usually negative.

ADDITIONAL NOTE

1. The classifying factor is mainly clinical, but it is advisable for workers to give consideration to the immunological and histopathological criteria. These factors may decisively influence the placing of a case in a particular type or group.

2. Cases of the lepromatous or tuberculoid types with only recessive or residual lesions remain in their respective types. Such cases may be described as recessive or residual, and these

terms should be added to the description of the main types, e.g., L(res), T(res), etc.

ADDENDA

DR. WADE registered a dissenting opinion regarding the recognition of a "macular" variety of the tuberculoid type, on the following grounds:

For classification to be understandable to all serious workers in leprosy, and not merely to the expert specialist, the line of demarcation between the tuberculoid type and the group or groups which present "simple" flat macules should be as distinct as possible. The distinction must necessarily be based on clinical aspects, primarily the morphology of the lesions, elevation and usually certain other features being characteristic of the lesser tuberculoid cases. In his opinion the inclusion, in this type, of a variety of simple macular cases, commonly known in the past as "maculo-anaesthetic," would cause much confusion. This same proposal was made by the classification committee of the Havana Congress, in that part of the report which was rejected by the Congress in plenary session.

Regarding the argument that a great majority of the lesions which it is proposed to call "macular tuberculoid" will, if active, show histologically some degree of tuberculoid change if it is sought with sufficient care, it is to be said that that change is not outwardly evident because of the relatively low degree of tissue reactivity. In keeping with that circumstance, cases with such lesions are as a rule less responsive to treatment than are frank tuberculoid cases.

Incidentally, the creation of a "macular" tuberculoid variety would increase confusion in terminology. All of the skin lesions of tuberculoid leprosy are commonly referred to by many leprologists as "macules," and the Japanese leprologists use the term "lepra maculosa" for the tuberculoid form as a whole.

For these reasons he adheres primarily to the definitions of the tuberculoid type and the indeterminate form adopted by the Expert Committee on Leprosy of the WHO, the pertinent parts of which are as follows:

(1) Cases of the indeterminate group present "flat skin lesions." The group "consists essentially of the 'simple macular' cases and comprises those cases previously known as 'maculo-anaesthetic'."

(2) Cases of the tuberculoid group present "erythematous lesions which are elevated, marginally or more extensively . . ." and in the minor variety the "skin lesions are only slightly to moderately elevated, often at the margin or even a part of the margin, usually with irregularity of the surface."

Agreeing fully that those cases which have become established in the "maculo-anaesthetic" form should not be retained in the "indeterminate" group, he holds that they should be recognized as a distinct "group," a view which is in accord with the conclusions of a special classification committee recently set up by the Indian Association of Leprologists.

DRS. KHANOLKAR and COCHRANE hold that there exist macular dimorphous lesions which have clinical, bacteriological, immunological and histological features which justify their inclusion in the borderline (dimorphous) group. They further are of the opinion that, if a careful study is made, a pure neuritic form of the borderline (dimorphous) group could be established.

The following is a description of what is considered a dimorphous macule:

These macules show, clinically, characteristics of both the tuberculoid and lepromatous types. Their distribution is that of lepromatous leprosy; the margin of the lesion is less definite than that of the tuberculoid macular lesion, but not so vague as that of the lepromatous macule; the surface tends to be dry and may show a wrinkled or creased appearance. On careful examination some loss of cutaneous sensibility can be elicited.

NOTE: In compiling this classification, the Committee is indebted to the report of the WHO Expert Committee on Leprosy, kindly supplied by Dr. Mario Giaquinto.

CLASIFICACIÓN

La clasificación de los casos de lepra, debe fundarse en factores o criterios del siguiente órden: 1°, clínicos; 2°, bacteriológicos; 3°, inmunológicos; 4°, histopatológicos. Los sistemas de clasificación existentes varian según la prioridad concedida a uno u otro de estos criterios.

El Comite ha pensado unanimemente que el criterio básico de la clasificación primaria debe ser clínica, comprendiendo la morfología de las lesiones cutáneas y las manifestaciones neurológicas. Además de este criterio clínico es indispensable el exámen bacteriológico de frotis de las lesiones cutáneas y de la mucosa nasal.

En el estudio de los casos debe utilizarse ampliamente el criterio inmunológico (lepromino-reacción) y la histopatología de las lesiones. Estos factores sirven para la determinación de los tipos y pueden ser esenciales para los grupos o variedades.

El exámen histopatológico, aunque importante para el diagnóstico de la forma de lepra y por consiguiente para el pronóstico, no debe dominar en la clasificación primaria, excepto cuando indique claramente que la clasificación clínica del caso ha sido erroneo. En tales casos, si la lepromina-reacción está de acuerdo con los datos histopatológicos el caso debe ser clasificado de nuevo.

Los casos deben ser clasificados de acuerdo con los datos existentes en el momento del exámen. Pueden o no mostrar, por los antecedentes o por estigmas objetivos, que anteriormente pasaron por otra forma evolutiva y a veces esta comprobación puede influir para su clasificación, tanto como los hallazgos actuales.[1] Los datos obtenidos pueden indicar un posible cambio o evolución hacia otra fase o forma de la enferme-

[1] Se puede saber por ejemplo gracias a estigmas persistentes que una lesión macular lisa ha sido previamente tuberculoide. Este caso debe ser clasificado como tuberculoide residual y no como indeterminado.

dad, pero estos hallazgos no deben influir para determinación de tipo o grupo antes de que ésta transformación ocurra realmente.

El Comite considera que este sistema de clasificación ofrece toda clase de posibilidades para ulteriores progresos o perfeccionamientos.

CLASIFICACIÓN PRIMARIA

El Comité recomienda que se reconozcan dos *tipos* definidos de lepra: Lepromatoso y Tuberculoide, manteniendo así el concepto de polaridad. Recomienda igualmente que se reconozcan dos grupos de casos, el Indeterminado y el Borderline (Dimorfo).

A continuación se definen los conceptos de tipo y grupo:

Tipo: Es el conjunto de caracteres esenciales clínicos y biológicos bien definidos, con marcada estabilidad y mutua incompatibilidad.

Grupo: Es el conjunto de casos con carácteres comunes menos definidos, menos estabilidad y evolución incierta.

Variedad: Es una subdivisión de tipo o grupo.

TIPOS, GRUPOS Y VARIEDADES PROPUESTAS

TIPO LEPROMATOSO (L)
- Macular
- Difusa
- Infiltrada
- Nodular [2]
- Neuritica pura (?)

TIPO TUBERCULOIDE (T)
- Macular
- Tuberculoide menor (micropapuloide, etc.)
- Tuberculoide mayor (placas, lesiones anulares, etc.)
- Neuritica pura

GRUPO INDETERMINADO (I)
- Macular
- Neuritica pura

GRUPO BORDERLINE (Dimorfo)
- Infiltrada
- (Otras?) [3]

TIPO LEPROMATOSO (L)

Es el tipo maligno, especialmente estable[4] con numerosos bácilos en el exámen bacteriológico. Se caracteriza por lesiones cutáneas más o menos infiltradas y por lepromino-reacción

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[2] Algunos investigadores han observado casos de esta variedad, pero hasta ahora no se encuentra comunicación alguna en la literatura médica.

[3] Ver el addendum de los Dres. Khanolkar y Cochrane.

[4] La palabra "estable" significa estabilidad en cuanto al tipo, no en cuanto a la evolución de la enfermedad.

negativa. Los troncos nerviosos periféricos son invadidos de modo manifiesto a medida que la enfermedad progresa, habitualmente de manera simetrica y a menudo dejando secuelas nerviosas en las etapas avanzadas de la enfermedad.

TIPO TUBERCULOIDE (T)

Es el tipo habitualmente benigno, estable,[4] con bacteriología generalmente negativa. Se caracteriza en la mayoría de los casos por lesiones eritematosas, elevadas marginalmente o en toda su extensión. La lepromino-reacción es positiva.

En cierto número de casos pueden aparecer secuelas por invasión de troncos nerviosos periféricos, las cuales pueden dar lugar a serias alteraciones a causa de invalidez permanente.

Esto ocurre frecuentemente como resultado de la extensión del proceso por las ramas nerviosas, más bien que por diseminación hematógena y por consiguiente con a menudo unilaterales y asimétricas.

La lepra tuberculoide debe ser dividida en las siguientes variedades.

Tuberculoide macular (Tm).—Estos casos presentan maculas de limites netos, bien definidos de superficie lisa y seca, invariablemente con disminución de la sensibilidad cutánea. Son caso siempre negativos al exámen bacterioscópico cuando lo más con unos cuantos bácilos.

Tuberculoide menor (micropapuloide, etc.) (Tt).—Las lesiones cutáneas son ligera o moderadamente elevadas, a menudo solo en el margen y aún en solo una parte de este, generalmente con irregularidad de la superficie. Las lesiones tienden a ser relativamente superficiales y no es frecuente encontrar ramas nerviosas aumentadas de volúmen asociadas a las manifestaciones cutáneas.

Tuberculoide mayor. (placas, lesiones anulares, etc.) (TT).—Las lesiones cutáneas con a menudo lisas pero más marcadamente elevadas e infiltradas que en la variedad menor y el área afectada es generalmente más extensa. Las lesiones más recientes pueden mostrar solo regresión central o ausencial de ella. Como el proceso es más profundo, con frecuencia se encuentra una acentuada invasión de los nervios asociados.

GRUPO INDETERMINADO (I)

Incluye casos benignos, relativamente inestables, rara vez

[4] La palabra "estable" significa estabilidad en cuanto al tipo, no en cuanto a la evolución de la enfermedad.

positivos al exámen bacterioscópico y que presentan lesiones cutáneas planas las que pueden ser hipocrómicas e eritematosas. La lepromino-reacción es negativa o positiva. En casos que han permanecido durante largo tiempo dentro de este grupo pueden aparecer neuritis más o menos extensas. Este grupo indeterminado, comprende esencialmente los casos "maculares simples". Estos pueden evolucionar hacia el tipo lepromatoso o al tuberculoide o pueden permanecer indefinidamente sin experimentar transformación alguna.

GRUPO BORDERLINE (DIMORFO)

Incluye casos malignos, muy inestables, casi siempre con numerosos bacilos al exámen bacterioscópico y lepromino-reacción generalmente negativa. Tales casos pueden proceder de un caso tuberculoide, como resultado de reacciones repetidas y en ocasiones evoluciona hacia el tipo lepromatoso. En la mucosa nasal las pruebas baciloscopias pueden ser negativas aunque las lesiones de la piel sean positivas.

Las lesiones cutáneas en placas, bandas, nodulos, etc. se distribuyen en forma muy similar a las de la lepra lepromatosa, salvo su llamativa simetría. Los lóbulos auriculares tienden a tomar el aspecto infiltrado propio de la lepra lepromatosa. Las lesiones tienen habitualmente una consistencia blanda y un aspecto suculento y su perfieria desciende gradualmente desde el centro y no tiene el corte abrupto marginal, bien definido, que se ve en el tipo tuberculoide; por esta razón tales lesiones están expuestas a ser erroneamente consideradas como leproma.

La superficie de las lesiones es generalmente lisa, de aspecto brillante y tinte violáceo, algunas veces (en pieles blancas) presentan una coloración parduzca o sepia.

EPISODIOS REACCIONALES

Todas las formas de lepra pueden tener episodios de reactivación o reacción. Debe dársele especial atención a tres de los principales episodios agudos de la lepra, a saber:

Lepra lepromatosa reaccional.—Se debe distinguir dos formas:

1.—Reacción leprosa (de la cual hay quizá dos o más variedades) consiste principalmente en la agravación de las lesiones cutáneas preexistentes, habitualmente acompañadas de fiebre y extensión de los procesos lepromatosos.

2.—Eritema nudoso leproso: Se carateriza por la aparición de nudosidades subcutáneas eritematosas acompañadas a veces de fiebre; esta tiene como regla un pronóstico favorable.

El Comité desea llamar la atención hacia un cuadro especial conocido como el "fenómeno de Lucio" o "eritema necrotizante," que se produce solamente en la lepra lepromatosa difusa, sobre todo en Mexico y América Central.

Lepra tuberculoide reaccional.—Lesiones infiltradas de apariencia activa y suculenta, sin regresión central, originadas bruscamente en lesiones tuberculoides mayores o en lesiones de menor grado (tuberculoide de menores o aún indeterminadas) o en lugares no previamente afectados. En algunos casos pueden aparecer nódulos de origen hematógeno más o menos numerosos y ampliamente diseminados. Las lesiones de los troncos nerviosos periféricos se pueden acentuar llegando a producirse necrosis y hasta la formación de abcesos. Bacteriológicamente mientras las lesiones cutáneas son positivas (algunas veces en forma intense), la mucosa nasal por lo común permanece negativa. Durante la reacción la respuesta a la lepromina puede decrecer en intensidad. Generalmente no hay fiebre ni otros síntomas generales.

Reacción en casos borderline (*dimorphous*).—Aquí las lesiones se hacen intensamente ademátozas y descamativas? La reacción se extiende frecuentemente a los nervios? Sobreviniendo dolores y trastornos funcionales nerviosos. Las lesiones cutáneas pueden ulcerarse superficialmente durante éste período y algunas veces en forma extensa y profunda, la piel se muestra muy sensible. Bacteriológicamente las lesiones son intensamente positivas. La lepromino-reacción habitualmente es negativa.

NOTA ADICIONAL

1.—El factor primordial para la clasificación es clínico, pero es aconsejable a los médicos el tomar en cuenta los criterios inmunológicos e histopatológicos. Estos factores pueden pesar decisivamente para la ubicación de un caso en un tipo o grupo determinado.

2.—Las lesiones residuales lepromatosas o tuberculoides permanecen en sus respectivos tipos aún aquellos que solo muestran signos de regresión. En tales circunstancias éstos casos pueden ser descritos como residuales o regresivos y éstos términos deben agregarse a la descripción de los tipos principales. Ej; L (reg), T (reg.), etc.

NOTAS ADICIONALES

El DR. WADE expuso su opinión distinta con respecto al reconocimiento de la variedad "macular" del tipo tuberculoide fundándose en los siguientes argumentos:

Para que una clasificación pueda ser inteligible a todos los trabajadores serios en Lepra y no meramente al especialista experto, debería haber una línea de demarcación entre el tipo tuberculoide y el grupo o grupos que presentan "simples" máculas aplanadas, de la manera más clara posible. La diferenciación debe basarse necesariamente en el aspecto clínico, preferentemente en la morfología de las lesiones así como la elevación y otros rasgos carácterizan habitualmente a los casos discrétamente tuberculoides. En su opinión la inclusión en este tipo de una variedad de casos maculares simples, por lo común conocidos en el pasado como "maculoanestésicos" causarían mucha confusión. Esta misma proporción fue hecha por el Comite de clasificación del Congreso en La Habana en aquella parte del informe que fué rechazada por la Asamblea en su Sesión Plenaria. Por lo que respecta al argumento de que la gran mayoría de las lesiones que se propones denominar—"Tuberculoide macular" mostrarán cuando estén en actividad de una estructura histológica hasta cierto punto tuberculoide, si se las examina cuidadosamente, cabe responder que tal alteración no es fácilmente evidencial dado el escaso grado de reactividad tisular. De acuerdo con esta circumstancia los casos con lesiones cutáneas de este tipo son por regla general menos sensibles al tratamiento que los casos francamente tuberculoides.

Por otra parte la creación de una variedad "macular tuberculoide" aumentarían la confusión en la terminología. Todas las lesiones cutáneas de la lepra tuberculoide son habitualmente designadas por los leprólogos como "Macular" tanto que los Leprólogos japoneses llegan hasta el extremo de emplear el termino "lepra maculosa" a la lepra tuberculoide.

Por éstas razones se adhiere a las definiciones de los tipos tuberculoides a indeterminadas adoptadas por el Comite de Expertos de la O.M.S. en la parte pertinente que dice así: (1) Los casos del grupo indeterminado presentan "lesiones cutáneas planas". Este grupo consiste esencialmente de los casos "maculares simples" y comprende aquellos casos anteriormente como "máculoanestésicos".—(2) Los casos del grupo tuberculoide presentan "lesiones eritematosas elevadas en su margen o en toda su extensión" . . . y en la variedad menor "las lesiones cutáneas son solo ligera o medianamente elevadas a menudo en el borde y a veces solo en una parte de ésta, presentando frecuentemente una superficie regular".

Convencido íntimamente que aquellos casos ya estabilizados en la forma "Máculoanestésica" no deben ser incluidos en el grupo indeterminado sostiene que debieran ser reconocidos como grupo distinto, punto de vista éste que está de acuerdo con las conclusiones del Comite de clasificicación de la Asociación de Leprólogos Indues.

Los Dres. Khanolkar y Cochrane estiman que existen lesiones maculares dimorfas las cuales tienen aspectos clínicos, bacteriológicos, inmunológicos e histopatólogicos que justifican su inclusión en el grupo dimorfo (Borderline). Además son de opinión que, si se hace un estudio cuidadoso, una forma neurítica pura del grupo dimorfo (Borderline) podría ser establecida.

La siguiente es una descripción de lo que se considera como una mácula dimorfa;

Estas máculas muestran clinicamente características de las formas lepromatosas y tuberculoides. Su distribución es la de la forma lepromatosa; los bordes de las lesiones son menos definidos que los del tipo macular

tuberculoide pero no tan difuso como los de la mácula lepromatosa; la superficie tiende a ser seca y puede mostrar un aspecto amigado o tumefacto. En un exámen cuidadoso puede apreciarse alguna pérdida de la sensibilidad cutánea.

NOTA.—Al redactar ésta clasificación, el Comité agradece al informe del Comité de Expertos en Lepra de la O.M.S. algunos párrafos de allí tomados.

TREATMENT [1]

GENERAL

In the report of the Fifth International Leprosy Congress, held in Havana in 1948, sulphone treatment of leprosy was discussed and very favourable results were recorded. In the five years that have passed since then the use of the earlier forms of sulphone treatment have been continued and extended, new forms of sulphone treatment have been developed and very widely applied, and much more information is now available. In general, the value of the sulphones in the treatment of all forms of leprosy has been confirmed, but at the same time certain limitations of the treatment have become more apparent. In the present report an attempt is made to assess the present position.

During these five years, new chemotherapeutic agents and antibiotics originally developed for use in tuberculosis have been used in leprosy. The results of such trials are here considered, and a preliminary assessment of them is attempted.

SULPHONE TREATMENT

The Committee is agreed that the sulphone drugs have been proved by twelve years of clinical trials to be more effective than any treatment previously used. At present they must be considered the basic treatment of all forms of leprosy.

Forms of sulphone treatment.—A variety of mono- and di-substituted forms of sulphone drugs have been prepared and tried clinically since 1941, but there is no clear indication that any one compound is more effective than any other. The parent drug, 4,4′-diaminodiphenyl sulphone (DDS), once found too toxic for use in man, has been used extensively since 1948 in a much reduced dosage, and is safe and as effective as the

[1] The Committee on Treatment was composed as follows: Dr. José N. Rodriguez, *chairman*, Dr. Lauro de Souza Lima, *vice-chairman*, Dr. José Gómez Orbaneja, *secretary*, and Drs. A. R. Davison, H. Floch, John Lowe, Salomón Schujman, M. Santos Silva, and Rolla R. Walcott, *members*.

substituted compounds. The smallness of the dose of D.D.S. makes it much less expensive to use than the compounds.

The tolerance of different people and different races to sulphones appears to vary. The standard dose of D.D.S. for adults should not be less than 300 mg. a week, and not more than 1,200 mg. a week. The drug can be given daily, on alternate days, twice weekly, or weekly. It can be given by mouth or by intramuscular injection. The very large number of complex sulphones now in use makes it impossible to give here details of dosages. The dosages of some of them are detailed in the proceedings of the Havana Congress.

Induction and maintenance.—Gradual induction of sulphone treatment is of paramount importance. Even in robust patients the initial dose should be about one-fourth of the standard, and the gradual increase to the standard should take six to eight weeks. In debilitated patients the initial dose should be lower and the increase slower. Regular treatment must be maintained, but some workers find brief rest periods desirable. Increase of the dosage above those generally accepted may increase toxicity and does not improve results. Attempts to improve treatment by giving sulphones in combination with other therapeutic agents have been made, without conclusive results.

Toxicity and complications.—The following toxic effects of sulphone therapy have been recorded: allergic dermatitis, psychosis, hepatitis, anaemia and anorexia. Of these, dermatitis and psychosis are the most serious. The frequency and severity of these conditions vary widely in different parts of the world.

Various complications may arise during sulphone treatment, among which are erythema nodosum leprosum, neuritis, eye complications and other sub-acute manifestations.

The above toxic effects and complications necessitate careful regulation of the treatment to the individual patient, stoppage of treatment for a period, or occasionally a change to another form of treatment.

Mode of action.—The mode of action of sulphone drugs in leprosy is not clear. They are apparently not bacteriocidal; they may be bacteriostatic.

Results.—The *early results* of sulphone treatment as described below are recorded by almost all workers. Most patients show decided clinical improvement within a period of months after the treatment is begun. There is usually an improvement of general health with increased appetite, body weight and strength, which is accompanied by a decrease of distressing

symptoms due to the disease. Specific lesions usually recede. Bacteriological improvement is slower than symptomatic and clinical improvement.

Experience of the *later phases* and *end results* of treatment varies widely. In some centres, after prolonged treatment, clinical and bacteriological arrest of the disease has been attained in a high proportion of cases, and has been maintained over a period of years. In other centres, arrest has occurred in only a relatively small proportion of cases, and relapse has not been uncommon; such findings have led to the suggestion, that after long treatment, sulphone resistance may develop in the bacilli. There is no strong evidence for or against this idea.

The type and the duration of the disease before the institution of treatment vary widely in different centres, and this has an influence on the duration of treatment needed to arrest the disease, and on the end results of treatment.

Further, it is generally accepted that the severity of leprosy differs in different races, and it seems likely that the response to treatment will vary correspondingly.

These two factors may help to explain the disparity of results recorded in different centres.

Management of "arrested" cases.—Various observations indicate that arrested cases are not completely freed of leprosy bacilli, and that reactivation of the disease is therefore not unlikely. Continuing observation is indicated in all "arrested" cases in order that any reactivation may be detected as soon as possible.

The after-treatment of "arrested" cases may reduce the relapse rate, and, with oral administration of the drug after-treatment can be very simple. It is a recommended procedure in those areas where it is practicable.

OTHER THERAPEUTIC AGENTS

(*a*) *Chaulmoogra oil and derivatives.*—Nearly all workers have abandoned the use of chaulmoogra oil in favour of sulphone treatment. A few experienced workers continue to use chaulmoogra oil as well as sulphones.

(*b*) *Thiosemicarbazones.*—Para-acetamidobenzaldehyde thiosemicarbazone (TB-1) is the only one of these drugs which has been widely used. Reports of its value in leprosy vary greatly. A few workers have found it equal to sulphones; most find it less effective.

Serious toxic effects may be seen, especially in the first

few weeks of treatment, agranulocytosis, hepatitis, and severe anaemia being the most important.

We consider that the dose should not exceed 300 mg. a day in the adult. Some workers find even this dose too high, and use a maximum of 150 or 200 mg.

At present, thiosemicarbazone is recommended only as a *useful alternative treatment* for those patients who do not tolerate sulphones, or who fail to respond to sulphones. Further work is needed before a definite appraisal of this drug in leprosy can be made.

(*c*) *Isonicotinyl hydrazide (INH)*.—Nearly all workers feel that INH has little beneficial action in human leprosy. Its use in combination with other agents may be worth study.

(*d*) *ACTH and cortisone*.—There is wide agreement that intramuscular injections of these hormones have a striking effect in relieving the acute and sub-acute manifestations of leprosy, and that small doses may be effective. There is, however, a wide difference of opinion regarding the late results of this hormone treatment in leprosy. Some workers find that the cessation of hormone treatment is frequently followed by the recurrence of the acute manifestations, and by an increase in the underlying disease; they think that the use of these hormones should if possible be avoided in the presence of leprous or any other infection. Other workers have not encountered this difficulty and do not share this view.

The local use of cortisone for eye complications by eye-drops or by subconjunctival injection is not open to this objection, and is often of great value.

Short courses of injections of ACTH or cortisone have been reported to be of great value in the treatment of serious toxic and allergic reactions to drugs, e.g. sulphones and thiosemicarbazone.

(*e*) *Streptomycin*.—Trials of this antibiotic have been made and are in progress. As yet no striking results have been recorded.

Because of its lower toxicity dihydrostreptomycin has been found preferable to ordinary streptomycin. The early response of the disease to streptomycin has tended to be slower than to sulphones. Later, after nearly one year, the difference has been slight.

The dose recommended, 1 gramme three times a week, has been given for one year without measurable damage to the eighth cranial nerve.

Some workers have found streptomycin to be of some value in the relief of the acute manifestations of leprosy.

The use of streptomycin in leprosy must still be regarded as experimental.

(*f*) *P.A.S.*—This drug has been tried in leprosy, alone and in combination with other agents. No striking results have been observed.

PHYSICAL THERAPY AND SURGERY

While chemotherapy has greatly improved the general outlook in the treatment of leprosy, its action on trophic lesions produced by nerve involvement or nerve destruction is often slight. In dealing with these conditions affecting the hands, the feet, and sometimes the face, physiotherapy, surgery and orthopaedics have a place, which however has not yet been fully defined. A more thorough study of these matters is urgently needed.

Physiotherapy may ameliorate some of the symptoms caused by peripheral neuritis, and may be a valuable aid in the post-operative care of patients undergoing surgical treatment.

Reconstructive surgery is most beneficial in patients whose disease is clinically quiescent or arrested. Tendon transplantations, arthrodeses, and other surgical procedures may improve the function of contracted hands. Amputations may be needed, particularly in the feet. Successful surgery of this nature may contribute much to the rehabilitation of patients in whom the disease has become arrested.

THERAPY RESEARCH

The favourable results of the present methods of chemotherapy of leprosy should not be allowed to obscure the great need for new chemotherapeutic agents acting with greater speed and efficacy, or to handicap research directed towards the establishment of more effective treatment.

There is urgent need for large scale, carefully planned and accurately conducted therapeutic trials of certain agents already available, and of new agents as they become available. Such trials should include studies of possible therapeutic agents given singly and in combination. In view of the rather wide differences of results of chemotherapy in people of different races, therapeutic trials should be made in different centres and in different countries.

The response of a suitable group of cases of leprosy to the

well-established sulphone drugs may be used as the control in experiments designed to assess the value of newer drugs.

ADDENDUM

DR. SCHUJMAN holds that some authors who have studied comparatively the effects of both chaulmoogra and the sulphones maintain that chaulmoogra oil, if given in sufficient doses (15 to 25 c.c. weekly) is sufficiently active in all forms of leprosy to justify its retention in the therapeutic armamentarium.

Discussion, by Dr. Laviron (France): Au sujet du rapport de la Commission de thérapeutique, le rapport a été déclaré "adopté" avant que les congressistes aient eu le temps de prendre la parole pour la discussion. En ce qui mi concerne, voici ce que j'avais à dire:

Je suis absolument d'accord avec le Dr. Schujmann sur sa proposition en ce qui concerne les chaulmoogriques. Il a été dit que les sulfones étaient actives dans toutes les formes de lèpre mais notre expérience nous a montré que l'huile de chaulmoogra étai plus rapidement active que les sulfones dans les formes tuberculoides.

Toute notre campagne antilépreuse, dont le succès est pour nous incontestable en Afrique Occidentale Française, a été basée sur l'huile de chaulmoogra que nous utilisons surtout par la voie intraveineuse.

De plus, dans ce rapport il n'a pas été tenu compte des traitements en masse par des suspensions de D.D.S. dans le chaulmograt d'éthyl, qui joue un rôle retard indiscutable et qui permet de limiter les injections au nombre de deux par mois, et d'étendre aussi la thérapeutique aux malades vivants éloignés des centres et qui sont les plus nombreux.

Il ne faut pas diviser les mèdecins en chaulmoogristes et sulfonistes. Nous sommes tous partisans des médications nouvelles actives et d'application facile, mais il est regrettable de voir l'ostracisme dont fai l'objet l'huile de chaulmoogra, et ceci nous parâît particulièrement injuste.

TRATAMIENTO

CONSIDERACIONES GENERALES

En el informe del V Congreso Internacional de Lepra, Habana, 1948, fué discutido el tratamiento sulfónico de la lepra, y se consignaron resultados muy favorables. En los cinco años que han pasado desde entonces ha continuado y se ha extendido el uso de las primeras formas de tratamiento sulfónico y otras nuevas se han desarrollado y aplicado muy ampliamente. Disponemos ahora de mayor información. En general ha sido confirmado el valor de las sulfonas en el tratamiento de todas las formas de lepra, pero al mismo tiempo se han hecho más evidentes ciertas limitaciones del tratamiento. En este informe se procura asesar la situacion actual.

Durante estos cinco años han sido usados en lepra nuevos agentes quimioterapeúticos y antibióticos, originalmente em-

pleados en tuberculosis. Los resultados de tales ensayos son considerados y se intenta una valuación preliminar.

TRATAMIENTO SULFONICO

El Comité está de acuerdo en que las sulfonas, que han sido demostrado en su experimentación durante doce años que son más efectivas que todo otro tratamiento anteriormente empleado. En el momento presente deben ser consideradas como el tratamiento básico de la lepra en todas sus formas.

Formas del tratamiento sulfónico.—Una variedad de medicaciones sulfónicas, mono- y di-substituidas, han sido preparadas y ensayadas clinicamente desde 1941, pero no hay indicio claro de que algún compuesto sea más efectivo que cualquier otro. La sulfona madre, 4,4′ diaminodiphenyl sulfona (D.D.S.) considerada demasiado tóxica en el hombre en algún momento, ha sido usada ampliamente desde 1948 a una dosis más reducida, y es tolerada y tan efectiva como los compuestos substituidos. La pequeñez de la dosis de D.D.S. hace menos costoso su empleo.

La tolerancia de los diferentes pueblos y razas a las sulfonas es variable. La dosis standard de D.D.S. para los adultos no debe ser menor de 300 mgrs y no mayor a 1.200 mgrs por semana. La droga puede ser administrada diariamente, en dias alternos, dos veces por semana o semanalmente. Puede ser dada por la boca o en inyección intramuscular. El gran número de compuestos sulfónicos sobre su dosificación. · La dosificación de algunas de ellas está detallada en las Resoluciones del Congreso de La Habana (1948).

Iniciación y mantenimiento.—La iniciación gradual del tratamiento sulfónico es de importancia fundamental. Incluso en enfermos vigorosos la dosis inicial debe ser aproximadamente de un cuarto de la standard, y el aumento gradual de la misma hasta alcanzar la dosis standard debe prolongarse hasta seis a ocho semanas. En enfermos debilitados la dosis inicial debe ser aún más reducida y más lento su aumento gradual. Debe mantenerse un tratamiento regular, aunque algunos investigadores creen oportuno algunos cortos períodos de descanso. Un aumento de la dosis por encima de la que son generalmente aceptadas puede aumentar la toxicidad sin mejorar los resultados. Han sido hechos ensayos para mejorar los resultados del tratamiento dando sulfonas en combinación con otros agentes terapeúticos, sin resultados concluyentes.

Toxicidad y Complicaciones.—Han sido señalados los sigui-

entes efectos tóxicos de las terapeútica sulfonica, aunque su incidencia y gravedad difieren ampliamente en las distintas partes del mundo: dermatitis alergica, psicosis, hepatitis, anemia y anorexia. De ellas las dermatitis y psicosis son las más graves. Durante el tratamiento sulfónico pueden presentarse varias complicaciones, entre las cuales están el eritema nudoso, neuritis, alteraciones oculares y otras manifestaciones subagudas.

Los efectos tóxicos y complicaciones ántes mencionados hacen preciso un cuidadoso ajuste del tratamiento al caso individual del enfermo, supresión temporal del tratamiento o ocasionalmente un cambio a otra forma de tratamiento.

Modo de acción.—El modo de acción de las drogas sulfónicas en la lepra no está claro. No son claramente bactericidas; pueden ser bacteriostaticas.

Resultados.—Los *resultados precoces* del tratamiento, como son descritos mas abajo, son referidos por casi todos los investigadores. La mayor parte de los enfermos leprosos muestran una mejoría clínica manifiesta en un período de meses despues del comienzo del tratamiento sulfónico. Hay usualmente una mejoría del estado general con aumento del apetito, del peso corporal y del vigor, acompañada de una reducción de los síntomas pertubadores debidos a la enfermedad. Las lesiones específicas habitualmente remiten. La mejoría bacteriológica es mas lente que la sintomática y clínica.

La experiencia en las *fases más tárdias* y sobre los *resultados finales* del tratamiento es muy variable. En algunos centros, después del tratamiento prolongado, ha sido alcanzada una detención clínica y bacteriológica de la enfermedad en una alta proporción de casos, que ha sido mantenida durante un período de años; en otros centros, la detención se ha logrado tan solo en una relativamente pequeña proporción de casos, y las recaídas no han sido raras; tales resultados han sugerido que después de un tratamiento prolongado puede desarrollarse una resistencia de los bacilos a las sulfónica. No hay evidencia clara en favor o en contra de esta idea.

El tipo y la duración de la enfermedad antes de la institucion del tratamiento varían ampliamente en los diferentes centros, y tienen una influencia sobre la duración del tratamiento necesario para detener la enfermedad y en los resultados finales.

Además, se acepta generalmente que la gravedad de la lepra difiere en las diferentes razas, y que parece verosimil que la respuesta al tratamiento variaría correspondientemente.

Estos dos factores pueden ayudar a explicar la disparidad de resultados referidos en los diferentes centros.

Conducta a seguir en los casos blanqueados.—Algunas observaciones sugieren que casos detenidos o estacionados no estan completamente libres de bacilos leprosos, y que por eso no es inverosímil una reactivación de la enfermedad. Por tal razón se aconseja una observacion continuada de todos los casos remitidos para que toda reactivación puede ser apercibida tan pronto como sea posible.

El tratamiento posterior de los casos detenidos o estacionados puede reducir el índice de recaídas, y con la administración oral de la droga el tratamiento posterior puede ser muy sencillo. Este procedimiento se recomienda para aquellas zonas en que es practicable.

OTROS AGENTES TERAPEUTICOS

(*a*) *Aceite de chaulmoogra y derivados.*—Casi todos los investigadores han abandonado el uso del aceite de chaulmoogra por el tratamiento sulfónico. Unos pocos investigadores experimentados continuan usando el aceite de chaulmoogra como las sulfonas.

(*b*) *Tiosemicarbazonas.* — Para-acetamidobenzaldehido tiosemicarbazona (TBI) es la única de las tiosemicarbazonas que ha sido ampliamente usada. Las referencias sobre su valor en lepra varian grandemente. Unos pocos investigadores la han encontrado igual a las sulfonas; otros menos efectiva.

Se han visto efectos tóxicos graves, especialmente en las primeras semanas de tratamiento, siendo las mas importantes la agranulocitosis, hepatitis y anemia intensa.

Consideramos que la dosis no debe exceder los 300 mgrs. por dia en el adulto; algunos investigadores la encuentran demasiado alta y usan como maximun de 150 a 200 mgrs.

En el momento presente la tiosemicarbazona es recomendada solo como un tratamiento útil de alternativa en aquellos pacientes que no toleran o no responden a las sulfonas.

Se necesita mayor experiencia antes de que una estimación de esta droga en la lepra pueda ser dada.

(*c*) *Hidrácida del ácido isonicotínico (INH).*—Casi todos los investigadores son de opinion de que la INH tiene poca acción beneficiosa en la lepra humana. Su uso en combinacion con otras drogas es digna de estudio.

(*d*) *ACTH y cortisona.*—Hay acuerdo general en que las inyecciones intramusculares de estas hormonas tienen un efecto

sorprendente en la anulacion de los síntomas agudos y subagudos de lepra, y en que dosis pequeñas pueden ser efectivas. Hay sin embargo grandes diferencias de opinion en lo que respecta a los resultados tardios del tratamiento hormonal es frecuentemente seguida por la reaparición de las manifestaciones agudas y por un incremento de la enfermedad sobre que asientan; piensan que el uso de estas hormonas debe ser, en lo posible, evitado en la lepra o en toda otra infección. Otros investigadores no se han tropezado con ésta dificultad y no participan de ésta opinión.

El uso local de la cortisona, en las complicaciones oculares, en colirios o por inyeccion subconjuntival no está sujeto a ésta objeción y es a menudo de gran valor.

Cortas series de inyecciones de ACTH o cortisona han sido referidas como de gran valor en el tratamiento de reacciones tóxicas y alérgicas graves a las drogas, p.ej. sulfonas y tiosemicarbazona.

(*e*) *Streptomycin.*—Han sido hechas pruebas con este antibiótico y continúan haciéndose. Hasta ahora no han sido referidos resultados notables.

A causa de su menor toxicidad la dihidroestreptomicina ha sido preferida a la estreptomicina ordinaria. Al comienzo, la respuesta de la enfermedad a esta droga es habitualmente mas lentà que la obtenida con las sulfonas. Despues de approximadamente un año, tal diferencia se reduce grandemente.

La dosis recomendada, un gramo tres veces por semana, ha sido dada durante un año sin daño mensurable para el octavo par.

Algunos investigadores han encontrado que la streptomycina es de algun valor en el alivio de las manifestaciones agudas de lepra.

El uso de la streptomycina en lepra debe ser considerado aun como experimental.

(*f*) *P.A.S.*—Esta droga ha sido ensayada en la lepra, ya solo o en combinación con otros agentes. No han sido observados resultados notables.

TERAPEUTICA FISICA Y CIRUGIA

Mientras la quimoterapia ha mejorado grandemente la perspectiva general en el tratamiento de la lepra, su acción sobre las lesiones troficas producidas por afectación nerviosa o destruccion de los nervios es frecuentemente escasa. En relación con estas situaciones que afectan las manos, los pies, y algunas

veces la cara, la fisioterapia, la cirugia o la ortopedia tienen un lugar, que no ha sido, sin embargo, hasta ahora enteramente definido. Se precisa un cabal estudio de estas cuestiones.

Las fisioterapia puede mejorar algunos de los síntomas causados por la neuritis periferica, y puede ser una ayuda valorable en el cuidado postpoeratorio de enfermos sometidos a tratamiento quirúrgico.

La cirugía reconstructiva es lo mas beneficioso en pacientes cuya enfermedad es clínicamente quiescente o esta detenida. Transplantaciones de nervios, artrodesis y otros procedimientos quirúrgicos pueden mejorar la función de las manos contracturadas. Amputaciones pueden ser necesarias, particularmente en los pies. Un cirugía feliz de esta naturaleza puede contribuir mucho a la rehabilitacion de enfermos en los que la enfermedad ha allegado a determerse.

INVESTIGACION TERAPEUTICA

Los resultados favorables de los metodos actuales de quimoterapia de la lepra no deben ocultar la gran necesidad de nuevos agentes quimioterapicos que actuen con mayor rapidéz y eficacia, o obstaculizar la investigacion dirigida hacia el establecimiento de tratamientos mas efectivos.

Hay necesidad urgente de ensayos terapéuticos en gran escala meticulosamente planeados y llevados a cabo exactamente con ciertos agentes de que ya se dispones y de nuevos que el futuro nos depare. Estos ensayos deben estudiar posibles agentes terapéuticos dados aisladamente o en combinación. En vista de las amplias diferencias en los resultados de la quimioterapia en pueblos e distintas razas, ensayos terapéuticos deben ser hechos en diferentes centros y en diferentes paises.

La respuesta de un conveniente grupo de casos de lepra a las drogas sulfonicas bien establecidas puede ser usada como control en los experimentos proyectados para determinar el valor de las nuevas drogas.

NOTA ADICIONAL

Algunos autores que han realizado el estudio terapéutico comparativo de las dos medicaciones sulfonas y chaulmoogra sostienen que éste ultimo es activo en todos los tipos y grupos de la lepra sobre todo si es administrado en dosis suficientes (de 15 a 25 cc semanales) justificando así que el chaulmoogra continúe figurando en el arsenal terapeútico antileproso. (DR. SCHUJMAN).

[NOTA: La discusión por el Dr. Laviron. No es traducido en Español, vease la versión Ingles.]

INMUNOLOGIA [1]

Por primera vez se incluye este capítulo en el temario de un Congreso Internacional de Leprología. Tal decisión es una consecuencia de la importancia que se asigna actualmente a la lepromino-reacción, después de muchos años de experiencia, así como también de los resultados que arrojan las investigaciones realizadas en diversos paises con el B.C.G., que podrían abrir nuevos horizontes en la profilaxis de esta enfermedad.

LEPROMINO-REACCIÓN

El empleo de la lepromino-reacción como prueba indicadora del grado de resistencia del organismo frente al *Mycobacterium leprae* adquiere día a día mayor difusión. Ella ofrece un valioso elemento de juicio en lo que respecta al pronóstico y clasificación de los casos de lepra, y por consiguiente su utilización en la práctica es recomendable.

Antigenos.—Para la preparación técnica de la lepromina se recomienda el método que más se aproxime a los siguientes objetivos: *a*) standardización; *b*) máximo aprovechamiento de elemento bacilar del material utilizado; y *c*) mayor simplicidad en su preparación.

El método de Dharmendra proporciona un antígeno standardizable con un mínimo desperdicio bacilar. Provoca en cambio reacciones tardías más débiles que las otras leprominas, debido quizá a que el cloroformo y el eter empleados en su preparación modifican la composición del bacilo.

El método de Fernández-Olmos Castro proporciona un antígeno standardizado, con bacilos muy poco modificados en su composición, pero tiene el inconveniente que en su preparación hay mayor desperdicio bacilar.

El método de Mitsuda-Hayashi, a pesar de proporcionar el antígeno más grosero (no standardizable), es el más ampliamente utilizado por la sencillez de su técnica de preparación y su eficacia práctica.

En base a las consideraciónes que anteceden el Comité recomienda emplear preferentemente: *a*) para el trabajo de rutina, el antígeno de Mitsuda Hayashi con la modificación de

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[1] The Committee on Immunology was composed as follows: Dr. J. M. M. Fernandez, *chairman*, Dr. Nelson de Souza Campos, *vice-chairman*, Dr. Xavier Vilanova Montiu, *secretary*, and Drs. L. M. Bechelli, R. Chaussinand, Jean Gaté, J. H. Hale, V. Martinez Dominguez and Sr. Hilary Ross, *members;* also Drs. N. Olmos Castro and Abrahão Rotberg, *co-opted members.*

Wade; *b*) para los trabajos de investigación, los antígenos más purificados y standardizables, especificando siempre el método de preparación utilizado.

Dada la escaséz cada dia mayor de material para la preparación de la lepromina, el Comité recomienda se intensifiquen los estudios de nuevos métodos y técnicas mas finas para su preparación, (ver apendice) así como también el uso del antigeno a diluciones mas elevadas. El uso de la lepromina visceral como indicó Campos debe también ser investigada con mas detalle.

El Comité sugiere finalmente la conveniencia de solicitar a los centros o laboratorios regionales que dispongan de facilidades, se encarguen de la preparación del antígeno para los establecimientos que lo soliciten y remitan el material correspondiente. Un antígeno tipo Mitsuda será tanto más uniforme cuanto mayor sea el número de lesiones con las que ha sido preparado.

LECTURA DE LA LEPROMINO-REACCION

La intradermo inyección de lepromina provoca, en los individous que reaccional positivamente, una doble respuesta: *a*) una reacción precoz—24-48 horas—o reacción de Fernández; *b*) una reacción tardía—alrededor de la cuarta semana—o reacción Mitsuda.

Reacción precoz.—Está constituida por una lesión eritematoinfiltrada a veces ya apreciable a las doce horas subsiguientes a la inyección, cuyo aspecto y evolución se asemejan al de las reacciones de tipo tuberculínico. Alcanza su acmé entre las 24 y 48 horas y comienza a declinar a partir de las 72 horas. En los casos intensamente positivos persiste mayor tiempo bajo la forma de un halo oscuro que circunda al nódulo tardío.

De los dos elementos que la constituyen solo tiene importancia para la lectura, la infiltración. Las reacciones puramente eritematosas deben ser consideradas dudosas o negativas, así como también las reacciones de comienzo muy precoz y que regresan o desaparecen antes de las 48 horas. La nitidez y configuración ameboide de los bordes es un signo muy peculiar de las reacciones muy positivas.

Es recomendable efectuar la lectura de los resultados a las 48 horas ajustándose al siguiente criterio:

Negativa (–): Ausencia de reacción o eritema sin infiltración o eritema de infiltración menor de 5 mm. de diámetro.

Dudosa (±) Reacción eritemato-infiltrada con infiltración de diámetro mayor de 5 mm. y menor de 10 mm.

Positiva débil (+): Reacción eritemato-infiltrada con infiltracion de diámetro mayor de 10 mm. y menor de 15 mm.

Positiva franca (++): Reacción eritemato-infiltrada con infiltración de diámetro mayor de 15mm y menor de 20 mm.

Positiva intensa (+++): 20 mm. o más de diámetro.

Reacción tardía.—Está constituida por una infiltración nodular que se inicia a partir de la primera semana subsiguiente a la inyección, que alcanza su acmé alreadedor de la 4ª semana y regresa posteriormente dejando con frecuencia atrofia o cicatriz. Las reacciones intensamente positivas pueden llegar hasta la ulceración. A veces la evolución es acelerada y alcanza su plenitud antes de la 3ª semana, y otras veces se retarda llegando a su acmé después de la 4ª semana. En los casos negativos y dudosos puede ser recomendable una lectura ulterior hasta los 60 dias.

El criterio de lectura debe basarse no solo en el tamaño de la infiltración sino también en su aspecto y evolución.

Negativa (–): Ausencia de toda reacción local entre la 1ª y 4ª semana.

Dudosa (±): Infiltración dificilmente apreciable y menor de 3 mm. en el punto de inoculación.

Positiva débil (+): Infiltración franca entre 3 y 5 mm. de diámetro en el punto de inoculación.

Positiva franca (++): Infiltración nodular mayor de 5 mm. de diámetro.

Positiva intensa (+++): Cuando el infiltrado llega a la ulceración.

INTERPRETACION DE LOS RESULTADOS

Una lepromino-reacción positiva se interpreta como expresión de un cierto grado de resistencia frente al *Mycobacterium leprae,* tanto más pronunciada cuanto mayor sea el grado de positividad.[2]

Una reacción lepromino-negativa se interpreta:

a) En los enfermos de lepra y convivientes con formas baciláferas, como expresión, por regla general, de una resistencia deficiente.

b) En los individuos sanos no contaminados ésta negatividad carece de significación.

B.C.G. Y LA LEPROMINO-REACCION

Los estudios acerca de la positivización de la lepromino-reacción mediante el empleo del B.C.G. han adquirido gran difusión

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[2] Si bién es cierto que la reactividad intensa a la lepromina refleja biológicamente un pronóstico favorable, este estado de hipersensibilidad puede favorecer en determinados casos manifestaciones clínicas perjudiciales para el paciente (atrofias, mutilaciones, episodios reaccionales, etc.).

en los últimos tiempos. Es indudable que si la experiencia demostrase que ésta positividad artificialmente inducida tiene valor inmunitario, el hecho tendría influencia decisiva sobre la orientación futura de la profilaxis de la lepra.

El Comité está de acuerdo en aceptar:

1°. Los individuos sanos con lepromino-reacción positiva no provocada artificialmente, presentan con frecuencia un estado de resistencia biológica frente al *Mycobacterium leprae.*

2°. En los enfermos de lepra también se acepta el valor pronóstico favorable, desde el punto de vista biológico de una lepromino-reacción positiva no provocada artificialmente.

3°. El virage natural o expontáneo de la reacción tiene lugar en un alto porcentaje de casos.

4°. La administración de B.C.G. a individuos sanos lepromino-negativos, determina el virage de la reacción en un número elevado de casos.

5°. La administración de B.C.G. a las dosis corrientes por vía bucal está exenta de riesgos aún en los individuos alérgicos.

La cuestión de si una lepromino-reacción positiva artificialmente provocada por el B.C.G. tiene valor inmunitario o no, está en estudio, y por ahora nada concluyente puede afirmarse al respecto.

El Comité recomienda se intensifiquen las experiencias en éste sentido a fin de vislumbrar el valor que pueda tener ésta vacuna, así como también ampliar las investigaciones a otros procedimientos capaces de provocar igualmente el virage de la lepromino-reacción.

APENDICE

La siguiente descripción de la tecnica, mejorada por Wade, para la preparación del antigeno de Mitsuda-Hayashi referida en el texto de este informe, está tomada enteramente del informe de la W.H.O. Comite de Expertos en Lepra (W.H.O. Technical Reports Series No. 71, Setiembre 1953).

1. Para cada lote de lepromina, deben ser usados tejidos con lesiones de varios casos no debiendo prestar confianza absoluta a un determinado tejido, como por ejemplo el lobulo de la oreja. El proposito de esta mezcla de material es compensar las posibles deficiencias antigenicas de uno o más casos, incluyendo el material de otros los cuales pueden ser mas favorables.

2. Cada partida utilizada será seccionada y examinada bacteriologicamente, asegurandose de que solamente habran de ser utilizadas aquellas que contengan abundantes bacilos; los tejidos pobres en bacilos serán descartados.

3. Todo tejido extraño a la lesion en sí, será desechado. Esto incluye la grasa subcutanea y el tejido conjuntivo, así como la epidermis si la lesion el nodular o infiltrada, y si la piel es etripada con un nódulo subcutáneo y no está afectada.

4. Es preferible pesar los tejidos que serán utilizados antes de ser calentados. (Una pérdida de peso ocurre calentando, ya sea por ebullición ó por el autoclave, y sucede con solución salina ó sin ella.)

5. El tejido fraccionado es hervido ya sea por ebullición ó por el autoclave. Esta última forma de esterilización debe ser preferida si el tejido es enviado para su estudio a un laboratorio distante.

6. El material hervido es desmenuzado en un mortero agregando gradualmente hasta 20 m.l. de solucion salina por gramo de lesion.

7. El material es filtrado. La mejor filtración se hace a traves de una sola capa de malla de seda fina ó preferiblemente de nylon, ya que este no tiene atracción capilar para el agua. (Este procedimiento evita la pérdida de una porcion grande de tejido, como ocurre cuando son utilizados como filtros multiples capas de gasa de algodon que son muy absorbentes.) El nylon se coloca en un círculo de alambre permitiendo la formacion de una bolsa y encajandola sobre el embudo que se utilize. Se hace pasar la suspensión revolviendo suavemente con una espatula. El filtro de nylon, bien limpio puede ser esterilizado nuevamente y usado repetidamente.

8. El residuo que queda en el filtro puede ser colocado nuevamente en el mortero y vuelto a desmenuzar durante algunos minutos suspendido en solucion salina fresca y puesto nuevamente en el mismo filtro. (En este caso se puede usar 20 m.l. por gramo de tejido en el primer caso y 10 m.l. per gramo en el segundo, obteniendo asi 50 % mas de la preparacion final que cuando la pulpa tisular no es desmenuzada nuevamente).

9. Se agrega 0.5% de fenol a la suspensión filtrada, la cual es luego distribuida en receptaculos apropriados, los cuales son sellados y vueltos a hervir para asegurar su esterilidad, aunque la asépsia debe ser cuidada durante todo el procedimiento.

IMMUNOLOGY

For the first time this subject is included among the themes of an international congress of leprology. The decision to do this results from the importance now ascribed to the lepromin reaction, after many years of experience, and also from the results obtained in certain countries with B.C.G. which may open up new horizons in the prophylaxis of this disease.

THE LEPROMIN REACTION

The use of the lepromin reaction as an index of the degree of resistance to *Mycobacterium leprae* is constantly increasing. It offers a useful element in respect to prognosis and classification of cases of leprosy, and consequently its use in practice is recommended.

Antigens.—For the preparation of the antigen the Committee recommends the method which fulfills most closely the

following requirements: (*a*) susceptibility of standardization; (*b*) maximal utilization of the bacillary element of the material used; and (*c*) the greatest simplicity of preparation.

The method of Dharmendra gives an antigen which can be standardized with minimal loss of bacilli. On the other hand, the late reaction is weaker than with other lepromins, perhaps because the chloroform and ether employed in its preparation modify the composition of the bacilli.

The method of Fernández and Olmos Castro gives a standardized antigen with bacilli very little changed in their composition, but it has the disadvantage that a great many bacilli are wasted in its preparation.

The Mitsuda-Hayashi method, in spite of the fact that it gives a cruder antigen which cannot be standardized, is most widely used because of the simplicity of its preparation and its practical efficacy.

With these considerations in mind, the Committee recommends as preferable: (*a*) for routine work, the Mitsuda-Hayashi antigen as modified by Wade; (*b*) for investigations, the more purified and standardizable antigens, the method of preparation of which should always be specified.

Because of the increasing scarcity of material for the preparation of lepromin, the Committee recommends increased studies of new methods and refined techniques of preparation (see appendix), and also the use of higher dilutions of the antigen. The use of visceral lepromin as suggested by Campos should also be investigated further.

Finally, the Committee suggests that it would be desirable to ask central laboratories, with facilities for the purpose, to undertake the preparation of the antigen for distribution to those who may need it. An antigen of the Mitsuda type will be the more uniform, the more numerous the lesions from which it is made.

READING OF THE LEPROMIN REACTION

The intradermal injection of lepromin provokes, in those who react positively, a double response: (*a*) an early reaction in 24 to 48 hours—the reaction of Fernández; (*b*) a delayed reaction read at about the fourth week—the reaction of Mitsuda.

The Early Reaction.—This consists of an erythematous infiltrated lesion, sometimes evident twelve hours after the injection, the aspect and evolution of which resemble the reactions of the tuberculin type. It reaches its maximum after 24

to 48 hours, and begins to diminish after 72 hours. In strongly positive cases it persists for a longer time in the form of a dark halo surrounding the late nodule.

In the reading of the reaction the only element of importance is the infiltration. Reactions which present only erythema should be considered doubtful or negative, and also reactions which appear very early and regress or disappear before 48 hours. A sharp margin of ameboid configuration is peculiar to very strong positive reactions.

It is recommended that the results should be read after 48 hours, conforming to the following criteria:

Negative (–): Absence of reaction, or erythema without infiltration, or erythema with infiltration less than 5 mm. in diameter.

Doubtful (±): An erythematous-infiltrated reaction with infiltration more than 5 mm. and less than 10 mm. in diameter.

Weak positive (+): An erythematous-infiltrated reaction with infiltration more than 10 mm. and less than 15 mm. in diameter.

Moderate positive (++): An erythematous-infiltrated reaction with infiltration more than 15 mm. and less than 20 mm. in diameter.

Strong positive (+++): An erythematous infiltrated reaction with infiltration more than 20 mm. in diameter.

The Delayed Reaction.—This consists of a nodular infiltration which begins after the first week after the injection, reaches its maximum about the fourth week, and later regresses, frequently leaving atrophy or a scar. Intensely strong reactions may result in ulceration. Sometimes the evolution is accelerated and reaches its peak before the third week, while at other times it is delayed, reaching its peak after the fourth week. In negative or doubtful cases it may be well to make later readings up to 60 days.

The criterion of reading should be based not only on the size of the infiltration, but also on its appearance and evolution.

Negative (–): Absence of all local reaction between the first and fourth weeks.

Doubtful (±): Slight infiltration, difficult to detect and less than 3 mm. at the point of inoculation.

Weak positive (+): Frank infiltration between 3 and 5 mm. in diameter.

Moderate positive (++): Nodular infiltration larger than 5 mm. in diameter.

Strong positive (+++): When the infiltration undergoes ulceration.

INTERPRETATION OF THE RESULTS

A positive lepromin reaction is regarded as an expression of

a certain amount of resistance to *Mycobacterium leprae,* directly proportionate to the degree of positivity.[1]

A negative lepromin reaction is interpreted as follows:

(*a*) In patients with leprosy, and contacts living with open cases, it is generally regarded as a sign of deficient resistance.

(*b*) In healthy individuals not contaminated with leprosy, it is without significance.

B.C.G. AND LEPROMIN REACTION

Studies of conversion of lepromin negative individuals to positive by means of B.C.G. have been widely undertaken in recent times. There is no doubt that if experience shows that this artificially induced change is of value in immunity, this will have a decisive influence on the future orientation of the prophylaxis of leprosy. The Committee is in agreement in accepting:

(1) Healthy people with positive lepromin reaction, not artificially produced, frequently present a state of biological resistance to *Mycobacterium leprae.*

(2) In leprosy patients, a positive lepromin reaction, not artificially produced, gives, from the biological point of view, a favourable prognosis.

(3) Spontaneous or natural conversion of the reaction takes place in a large proportion of cases.

(4) The administration of B.C.G. to healthy individuals who are negative to lepromin, causes a change of the reaction in a large proportion of cases.

(5) The administration of B.C.G. in the usual doses by mouth is free from risk, even in allergic individuals.

The question of whether or not a positive lepromin reaction artificially induced by B.C.G. indicates immunity is being studied, and as yet no conclusive statement can be made regarding the matter.

The Committee recommends that experimentation be intensified to determine the value which this vaccine may have, and also that wider investigations be made with a view to finding other procedures equally capable of converting the lepromin reaction.

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[1] It is certain that intense reactivity to lepromin reflects biologically a favourable prognosis. This state of hypersensitivity may, in certain cases, result in clinical changes prejudicial to the patient (atrophies, mutilations, reactional occurrences, etc.).

APPENDIX

The following description of the improved (Wade) technique of preparation of the Mitsuda-Hayashi antigen, referred to in the text of this report, is taken verbatim from the report of the W.H.O. Expert Committee on Leprosy (W.H.O. Technical Reports Series No. 71, September 1953).

(1) For each batch of lepromin, lesion-tissue from several cases should be used, and reliance should not be placed alone on a tissue such as the ear lobe. The purpose of this "pooling" of material is to compensate for possible antigenic deficiencies of material from one or more cases by inclusion of material from others which may be more favorable.

(2) Each specimen used should be incised and a bacteriological smear examined, to ensure that only those which contain abundant bacilli will be used. Those poor in bacilli should be discarded.

(3) All tissue extraneous to the actual lesion mass should be trimmed off and discarded. This includes subcutaneous fat and loose connective tissue, as well as the epidermis if the lesion is a cutaneous nodule or infiltration, and the skin itself if it is removed with a subcutaneous nodule and is not involved in the lesion.

(4) It is probably preferable to weigh the tissues to be used before they are heated. (A material loss of weight occurs in the heating, whether that be done by boiling or by autoclaving, and whether it be done in saline solution or without it.)

(5) The trimmed tissue is heated either at boiling temperature or by autoclaving. The latter form of sterilization is to be used if the tissue is to be shipped to a distant laboratory for processing.

(6) The heated material is ground fine in a mortar with gradual addition of saline up to 20 ml per gram of tissue.

(7) The material is then filtered. Filtration is best done through a single layer of the finest mesh bolting cloth of silk, or preferably of nylon, the latter having no capillary attraction for water. (This process avoids the loss of a great deal of tissue suspension which occurs when highly absorbent multiple layer cotton gauze filters are used.) The nylon fabric is applied, provision being made for a pouch, to a wire ring made to fit the funnel to be used. The suspension is worked through by gentle scraping with a spatula. The nylon filter, properly cleaned, can be sterilized and used repeatedly.

(8) The residue left on the filter may be returned to the mortar, reground for some minutes, suspended in fresh saline, and put back into the same filter. (In this way 20 ml of saline per gram of tissue can be used in the first instance and 10 ml per gram in the second instance, thus obtaining 50% more of the final preparation than when the tissue pulp is not reground.)

(9) 0.5% of phenol is added to the filtered suspension which is then distributed in the desired containers, which are sealed and reheated to ensure sterility, although asepsis is practiced throughout.

EPIDEMIOLOGIA Y PROFILAXIS [1]

En el V Congreso Internacional de la Lepra, celebrado en la Habana en 1948, se trató detalladamente tanto la epidemiología como la profilaxis de la lepra, a la luz de los conocimientos predominantes en aquella fecha. Este informe tiene como principal objetivo hacer resaltar algunos hechos ocurridos en los últimos cinco años:

1°. La influencia que las nuevas medicaciones tienen como medidas profilácticas.

2°. Los promisorios resultados obtenidos hasta ahora con la lepromina-reacción inducida por el B.C.G.

EPIDEMIOLOGIA

El Comité hace resaltar la necesidad para los paises, con endemia leprosa, la importancia de obtener mayores datos sobre la prevalencia de dicha enfermedad.

La avaluación de dicha prevalencia, para paises muy populosos, será obtenida por la realización de censos que tomaran en cuenta:

a) Los grupos estudiados deberán ser relativamente numerosos y cuidadosamente seleccionados.

b) Serán considerados los factores económicos-sociales, climaticos, raciales, de sexo, edad y otros.

c) Se determinará la proporción de los tipos y grupos a que corresponden los casos encontrados.

Para obtener la curva de la prevalencia los censos se realizarán lo más frecuentemente posible, no debiendo exceder de los diez años.

Hacemos resaltar el concepto de que la avaluación de las medidas profilácticas serán hechas tomando por base los estudios epidemiológicos pués de los mismos dependerá su orientación.

PROFILAXIS

Las bases de la moderna campaña antileprosa se asientan sobre los siguientes postulados:

1. *Educacion y propaganda sanitaria*:

a) Formación de leprológos por medio de cursos especializados.

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[1] The Committee on Epidemiology and Control was composed as follows: Dr. Ernani Agricola, *chairman*, Drs. Jacinto Convit and Ricardo S. Guinto, *secretaries*, and Drs. Eduardo Carboni, A. Cordero Soroa, Orestes Diniz, J. A. Doull, J. Ross Innes and Obdulia Rodriguez, *members*.

b) Entrenamiento de los médicos higienistas que participarán, en lo posible, en la campaña contra la lepra.

c) Ilustración de los médicos generales.

d) Introducción o ampliación en los programas de estudio de las facultades de medicina de los modernos conocimientos leprológicos.

e) Preparación conveniente del personal auxiliar.

f) Propaganda sanitaria la cual se efectuará a través de los organismos especializados y tendrá como finalidad fundamental lograr los medios que hagan factible el hallazgo, lo más completo posible, de los casos del grupo indeterminado matriz de la endemia.

2. *Protección y control de convivientes*:

A. Protección:

a) Inducción de la lepromino reacción por el B.C.G.[2]

b) Tratamiento preventivo de los convivientes que permanecieren lepromino negativos, a pesar de la vacunación con el B.C.G., a partir de la edad de diez años. Se considera la posibilidad de aplicar dicho método en niños de edad inferior.

B. Control:

Deberá hacerse de acuerdo a la siguiente orientación:

a) Los convivientes lepromino positivos de los casos indeterminados y tuberculoides quiescentes no necesitan vigilancia.

b) Los convivientes lepromino positivos de casos contagiosos requieren vigilancia periódica aúnque no frecuente.

c) Los convivientes lepromino negativos deben ser controlados periódicamente con la mayor frecuencia posible.

3. *Tratamiento ambulatorio* de los casos tuberculoides e indeterminados; así como los casos lepromatosos con lesiones discretas, escasamente bacilíferos, suceptibles de negativización en un corto período de tiempo.

4. *Aislamiento selectivo* de los casos contagiosos. El período de hospitalización deberá ser lo suficiente hasta obtener la regresión clínica y negativización bacteriológica reiterada efectuada periódicamente teniendo en cuenta la orientación seguida por cada país. Conseguido lo cual, podrá ser transferido al dispensario donde continuará sometido a control y tratamiento regular.

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[2] El Consejo General del Congreso propuso que se suprimiera esta oración, sosteniendo que el uso del B.C.G. está todavia en fase de experimentación y que no se tiene suficiente evidencia para justificar el punto de vista indicado, de que es una medida establecida de profilaxis. La sesión plenaria final, sin embargo, decidió por votación mantener ésta afirmación.

5. *Investigación científica*: Esta actividad tiene especial relieve por los conocimientos que puede proporcionar sobre la endemia leprosa así como sobre los métodos de profilaxis.

6. *Asistencia social*: Deberá comprender la protección material y moral de los hijos y familiares que la necesiten hasta la readaptación del enfermo al medio social. Conseguida dicha readaptación se le considerará apto para el desempeño de sus labores.

Para lograr éstos objetivos de la moderna campaña antileprosa se dispondrá de los siguientes organismos:

1. *Sanatorio*: Tendrá como finalidad principal el reintegro de la salud física y moral en su más amplia acepción.

2. *Hospital urbano o de tránsito*: Podrá funcionar indistintamente como organismo independiente o bien como anexo al dispensario o a un hospital general en una sección adecuada.

3. *Dispensario*: Ocupará dentro de los órganos de la campaña antileprosa un lugar preponderante y dinámico por lo cual está indicada su creación en número suficiente y debidamente equipados para la ejecución de las siguientes actividades:

a) Educación y propaganda sanitaria.

b) Protección y control de convivientes.

c) Descubrimiento de nuevos casos, con especial atención a los del grupo indeterminado, por su posible evolución hacia el tipo lepromatoso.

d) Tratamiento de los enfermos y de los convivientes según las normas anteriormente expuestas.

e) Selección de los casos que serán hospitalizados.

f) Preparación del personal técnico.

g) Realización de investigaciones epidemiológicas.

4. *Preventorio*: Deberá ser un órgano también dinámico cuya finalidad primordial será la substracción de los niños de los focos infecciosos. Sus actividades técnicas serán regidas de acuerdo a las siguientes normas:

a) Se admitirá en ellos de preferencia a los niños convivientes de focos lepromatosos, lepromino negativos.

b) Se procederá a la estrecha vigilancia de los internados, especialmente de los lepromino negativos.

c) Se practicará la inducción de la lepromino reacción por el B.C.G. y se hará el tratamiento preventivo de los que permanecieren lepromino negativos.

d) Reintegración a la sociedad del niño que haya completado su ciclo de observación, que será lo más corto posible, continuando si es necesario bajo la protección del Servicio Social.

e) La educación de los niños internados se llevará a efectos preferentemente en los organismos respectivos, públicos o privados, ubicados fuera del preventorio, a fin de facilitar su futura reintegración a la sociedad.

5. *Instituto de investigación*: Creación y dotación adecuadas. Tendrán como finalidad el estudio de la enfermedad en sus aspectos epidemiológicos, preventivos y curativos.

RECOMENDACIONES

1.—Debido a la acción eficáz de las nuevas medicaciones es razonable presumir que dichas drogas reducen considerablemente el período de contagiosidad en los casos lepromatosos. Con objeto de investigar éste hecho, que conceptuamos de gran importancia, consideramos que deben realizarse extensas investigaciones en aquellos paises donde el aislamiento sanatorial es impracticable, con el fin de apreciar si hay una reducción de la incidencia de la lepra entre los convivientes de casos lepromatosos.

2.—El Comité recomienda que la vacunación con B.C.G. sea introducida en la campaña profiláctica. Recomienda también, que se efectuen los estudios precisos y en condiciones varias para determinar el valor exacto de éstas medidas y de la inducción de reactividad a la lepromina por el B.C.G. Considera de valor, poder comparar las posibles diferencias de la acción protectora de la vacunación con B.C.G., entre los convivientes separados de los focos basilíferos, con aquellos que continuen en contacto con la fuente de infección.

3.—Se recomienda que los Servicios de Salud Pública de los diversos países envíen periódicamente a la OMS, los informes referentes a la prevalencia de la lepra.

Se reafirma que la lepra continúa situada en el grupo de las enfermedades infectocontagiosas imponiéndose así la aplicación de las medidas profilácticas adecuadas.

4.—Recomiéndase, teniendo en cuenta las conquistas obtenidas con las nuevas medicaciones, la revisión de la legislación vigente en cada país. Esta contemplará las modernas bases de la profilaxis y asistencia social que han sido ya expuestas en éste informe.

5.—Se recomienda que los hijos de enfermos de lepra, separados inmediatamente después del nacimiento, sean de preferencia colocados en medio familiar o en Instituciones públicas o privadas destinadas a la protección de la infancia en general.

EPIDEMIOLOGY AND CONTROL

The Fifth International Congress of Leprosy, held in Havana in 1948, dealt in detail with the subjects of epidemiology and control of leprosy in the light of knowledge existing at that time. The present report gives emphasis to certain new facts which have been brought to light in the past five years, namely:

1. The influence that the new medicaments have with respect to control.
2. The promising results which have recently been obtained with the lepromin reaction induced by B.C.G.

EPIDEMIOLOGY

The Committee emphasizes, for those countries with endemic leprosy, the importance of obtaining more extensive data on the prevalence of the disease. The determination of prevalence, in highly populated countries, is to be accomplished by means of surveys, which should meet the following conditions:

(*a*) The groups studied should be relatively large, and carefully selected;

(*b*) Consideration should be given to the socio-economic and climatic factors, and to others including race, sex, and age.

(*c*) The proportions of the types and groups among the cases encountered should be determined.

To determine the trend of disease, such surveys should be made as frequently as possible, the intervals not exceeding ten years.

We emphasize the concept that the evaluation of control measures should be based on the results of such epidemiological studies.

CONTROL

The modern anti-leprosy campaign is based upon the following points:

1. *Education and health propaganda*:

(*a*) The training of leprologists by means of special courses of instruction.

(*b*) The training of health officers, who should participate, in every way possible, in the campaign against leprosy.

(*c*) The instruction of general practitioners.

(*d*) The introduction or development in the curricula of medical schools of adequate courses of instruction in modern leprology.

(*e*) The proper preparation of auxiliary health personnel.

(*f*) Health propaganda, which should be carried out by specialized organizations having as their ultimate aim the discovery, as completely as possible, of the cases of the indeterminate group, which form the matrix of the endemic condition.

2. *Protection and control of contacts*:

A. Protection:

(*a*) Induction of lepromin reactivity by means of B.C.G.[1]

(*b*) Preventive treatment of contacts beyond the age of ten years who remain lepromin negative in spite of B.C.G. vaccination. The possibility of applying this measure to children of younger age should be considered.

B. Control:

This should be effected with the following orientation:

(*a*) Lepromin-positive contacts of indeterminate and quiescent tuberculoid cases do not require surveillance.

(*b*) Lepromin-positive contacts of lepromatous cases require periodical, although not frequent, surveillance.

(*c*) Lepromin-negative contacts should be observed periodically, as frequently as possible.

3. *Out-patient treatment* of tuberculoid and indeterminate cases, and also lepromatous cases presenting few lesions with scanty bacilli, and which are susceptible of being made negative within a short period of time.

4. *Selective isolation* of contagious cases. The period of hospitalization should be sufficiently long to obtain clinical regression and bacteriological negativization in examinations made periodically, taking into account the conditions prevailing in each country. Once this has been achieved, the patient can be transferred to a dispensary, where he will continue to be under regular observation and treatment.

5. *Scientific investigation*: This activity is of special importance because of the knowledge to be derived from it regarding the prevalence and incidence and the methods of control.

6. *Social assistance*: This should include the material and moral assistance to the children and other relatives of the patients, until he is completely rehabilitated and able to return to his work.

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[1] The General Council of the Congress proposed that this sentence be struck out, holding that the use of B.C.G. is still in the experimental stage and that as yet there is no adequate evidence to justify the indicated view that it is an established measure of prophylaxis. The final plenary session, however, voted for the retention of the statement.

To accomplish these objectives of the modern anti-leprosy campaign, the following institutions should be provided:

1. *Sanitarium*: This institution should have as its principal objective the recovery of the physical and moral health of the patients in the broadest sense of the term.

2. *Urban or transient hospital*: Such a hospital may function either as an independent unit, or as an auxiliary of the dispensary or of a general hospital.

3. *Dispensary*: This entity should play a preponderant and dynamic role among the agencies of the anti-leprosy campaign. There should, therefore, be an adequate number of well-equipped dispensaries to carry out the following activities:

(*a*) Health education and propaganda.

(*b*) Protection and control of contacts.

(*c*) Discovery of new cases, with special attention to those of the indeterminate group because of their possible evolution to the lepromatous type.

(*d*) Treatments of patients and contacts according to standards previously stated.

(*e*) Selection of the cases which should be hospitalized.

(*f*) Training of technical personnel.

(*g*) The carrying out of epidemiological investigations.

4. *Preventorium*: This should also be an active organization, the primary aim of which is the removal of children from infectious environment. Its technical activities should be carried out in accord with the following points:

(*a*) Children in contact with lepromatous cases, who are lepromin negative, should be given priority for admission.

(*b*) The interned children should be subjected to close observation, especially those which are lepromin negative.

(*c*) Induction of lepromin reactivity by means of B.C.G. should be practiced, and preventive treatment should be given to those who remain lepromin negative.

(*d*) Reintegration into society of the children who have completed their periods of observation, which should be as short as possible. If necessary, observation should be continued by social service organizations.

(*e*) Education of the interned children, which should be carried out preferably by institutions, public or private, located outside the preventorium in order that their future reintegration in society may be facilitated.

5. *Research institution*: Such institutions, adequately sup-

ported, should be provided to study the disease with respect to its epidemiology, prevention and treatment.

RECOMMENDATIONS

1. Because of the efficacy of the new medicaments, it is reasonable to assume that these drugs will reduce considerably the period of contagiosity of the lepromatous cases. To investigate this matter, which we regard as of great importance, extensive investigations should be carried out in countries where institutional isolation is impracticable, with the aim of determining if there is any reduction of the incidence of leprosy among the contacts of lepromatous cases.

2. The Committee recommends that B.C.G. vaccination be introduced in the prophylaxis campaigns. It also recommends that adequate studies be carried out, under the most varied conditions, to determine the exact value of this measure and of the induction of lepromin reactivity by B.C.G. It would be of value to compare the possible differences of the protective effect of B.C.G. vaccination among contacts who are removed from infectious environments and among those who are not separated.

3. The Committee recommends that the public health services of the different countries send, periodically, to the World Health Organization information concerning the prevalence of leprosy. The Committee reaffirms that leprosy belongs to the group of infectious and contagious diseases, and that consequently definite measures of control should be employed when dealing with it.

4. The Committee, having in mind the advances made with the new medications, recommends the revision of existing legislation in the different countries. This should comprise the modern basis of control and social assistance, as set forth above.

5. It is recommended that the children of leprosy patients separated immediately after birth should, by preference, be placed with families, or institutions, public or private, which are designed for the protection of infants in general, and not in preventoria for leprosy contacts.

SOCIAL ASPECTS [1]

[1] The Committee on Social Aspects was composed as follows: Mr. Perry Burgess, *chairman*, Dr. A. Salazar Leite, *secretary*, and Drs. Luis Arguello Pitt, Harry L. Arnold, Jr., Felix Contreras, F. Hemerijckx, D. Maldonado Romero, L. Martinez Kleiser, and Etienne Montestruc, *members*.

PREAMBLE

For many years it has been increasingly recognized that the psychological factors involved in any disease, and especially in a chronic one, are of importance in the treatment of the patient. This is especially true with leprosy, an ailment which for centuries has been feared and abhorred.

This Committee considers it important that the Congress, while recognizing the difficulty of making detailed recommendations because of the widely divergent conditions existing in different countries, shall approve—in general terms—remedies for those factors which play an important part in the emotional state of the leprous patient. Is it not, after all, prejudice—growing out of ignorance of the true nature of the disease on the part of the patients, family, friends and neighbours—whch causes him to be feared and shunned, and which thus most deeply disturbs his state of mind? And this same state of mind causes him, far too often, to hide his identity behind a false name, even when his own is an honourable and respected one, and even to fear to present himself for treatment.

The few proposals which this Committee now makes are offered in the hope that they will be found to be practical and achievable. They are made in recognition of the fact that this problem varies widely from country to country throughout the world. They are made in the belief that there are certain factors which are universal and immutable; to those we have tried to give expression. Finally, they are made after consideration of the opinions and experience of more than a thousand workers in the field of leprosy in fifty-five countries.

REPORT

1. The Committee approves the action at the Havana Congress with regard to the words "leper" and "leprosy." (See Addendum.)

2. The Committee recommends that the Sixth International Congress applaud and encourage efforts now being made for the rehabilitation of the patient with leprosy, and in particular the programme of education for laymen and physicians in regard to the disease.

3. The Committee regards gainful work as of primary importance in the treatment and rehabilitation of patients with leprosy. In each country, choice of occupations must be made according to local circumstances. Governments and private institutions are urged to make every effort to guarantee work to

patients discharged from institutions, in compliance with local public health regulations. Vocational training should be provided for those patients needing it.

4. The Committee recommends that there be as little interference as possible with the normal lives and usual occupations of leprosy patients certified by leprologists as non-contagious, in so far as this is consistent with local public health regulations and the patients' own medical well-being.

5. The Committee recommends approval and encouragement of the provisions of governmental assistance for the support of the dependent families of patients isolated, or otherwise disabled, because of leprosy.

6. The Committee approves the care of patients with disabilities or permanent deformities in special institutions, so that the atmosphere among patients who are not so disabled or deformed will not have an unfavourable influence.

7. Private institutions for social relief, and those institutions which are collaborating with the governments to prevent, cure or control leprosy, should receive as much assistance from their governments as is consistent with complete freedom of action within the framework of the public health laws of the country.

8. The Committee recommends that existing laws in all countries be brought up to date and raised to the same level as the modern concepts that are the basis of our present prophylactic campaign.

ADDENDUM

With regard to paragraph 1 of the above report, the decisions of the Havana Congress on the words "leper" and "leprosy" were, briefly:

That the use of the term "leper" be abandoned in favour of "leprosy patient" (or the like); that the use of any such term, in any language, to which unpleasant associations are attached should be discouraged; but that "the term 'leprosy' should be retained as the scientific designation for the disease."

ASPECTOS SOCIALES

PREAMBULO

Durante muchos años se ha venido reconociendo la importancia que los factores psicológicos que acompañan a toda enfermedad, ejercen en el tratamiento del paciente, especialmente en las afecciones crónicas. Esto resulta especialmente verdad en el caso de una dolencia, como la lepra, que ha inspirado durante siglos, temor y repulsión.

Este comité considera importante que el Congreso, aún reconociendo la dificultad de hacer recomendaciones detalladas por causa de la gran diferencia de situaciones existentes en los diferentes paises, debe aprobar, en términos generales, soluciones para esos factores que desempeñan un papel principal en el estado emotivo del leproso. Porque, ¿no es, después de todo, un mero prejuicio nacido de ignorar la verdadera naturaleza de su enfermedad lo que hace al paciente ser temido y huido por parte de su familia, amigos y vecinos, alterando asi profundamente su estado de ánimo? Y es éste mismo estado de ánimo el que le lleva con demasiada frecuencia a ocultar su identidad bajo un falso nombre, aún cuando el suyo propio sea honorable y respetado, e incluso a rehuir su adecuado tratamiento.

Estas propuestas de nuestro Comité van redactadas con la esperanza de que habrán de resultar prácticas y hacederas. Han sido concebidas reconociendo el hecho de que este problema varía considerablemente de una nación a otra, en todo el mundo. Las hacemos, no obstante, en la creencia de que hay ciertos factores universales e inmutables; los cuales hemos tratado de expresar aquí. Finalmente han sido redactadas teniendo en cuenta las opiniones y experiencias publicadas en cincuenta y cinco naciones por más de un millar de investigadores en el campo de la lepra.

PROPOSICIONES

1. El Comite recomienda que el Sexto Congreso Internacional de Leprología ratifique el acuerdo adoptado por el Quinto Congreso Internacional de Lepra en cuanto se refiere a las palabras "lepra" y "leproso". (ver nota adicional)

2. El Comite recomienda que el Sexto Congreso Internacional de Leprología aplauda y estimule todos los esfuerzos que se estan realizando para rehabilitar al paciente de lepra, sobre todo en lo que se refiere al programa de educación del público y de la clase médica, respecto a ésta enfermedad.

3. El Comite considera que el trabajo remunerado es un factor de capital importancia en el tratamiento y rehabilitacion de los enfermos de lepra. En cada pais, el tipo de trabajo debe de estar de acuerdo con las circunstancias locales. Se recomienda a los gobiernos e instituciones privadas que realicen los mayores esfuerzos para garantizar el trabajo a aquellos pacientes dados de alta, de acuerdo con las medidas sanitarias locales. El trabajo vocacional debe ser facilitado a aquellos pacientes que lo nececitaren.

4. El Comite recomienda que, sin perjuicio de los regla-

mentos de sanidad pública vigentes en la localidad, debe hacerse la menor interferencia posible en la vida y ocupación normal de los pacientes que hayan sido certificados por leprólogos como no contagiosos.

5. El Comite recomienda aprobar y estimular las medidas de ayuda gobernamental para el sostenimiento de los familiares de los enfermos aislados o de otro modo incapacitados por la lepra.

6. El Comite recomienda la segregación en instituciones especiales, de los enfermos inválidos y con deformidades permanentes, para evitar la influencia desfavorable sobre los pacientes no inválidos.

7. Las instituciones privadas de asistencia social y aquellas instituciones que colaboran con los gobiernos para prevenir, combatir y curar el mal, deben recibir el máximo apoyo de parte de los gobiernos y debe permitirseles actuar con la mayor libertad, dentro de los límites que permitan las leyes sanitarias de cada país.

8. El Comite recomienda a todos los gobiernos, actualizar las leyes en vigencia para ponerlas a tono con los modernos conceptos que fundamentan las bases de una campaña profiláctica moderna.

NOTA ADICIONAL

De acuerdo con el primer párrafo de nuestras proposiciones, se explican aquí brevemente las decisiones que se tomaron en el Congreso de La Habana en lo relativo a las palabras "leproso" y "lepra":

El uso de la palabra "leproso" debe ser abandonada y substituida por "enfermo de lepra" (o término similar); que el uso de un término en cualquier lenguaje, que evocara un concepto desagradable debe ser desaconsejado; pero que "el termino 'lepra' debe ser mantenido como designación científica de la enfermedad."

INTERNATIONAL LEPROSY ASSOCIATION

MINUTES OF THE GENERAL MEETING HELD IN MADRID

The fourth general meeting of the Association was held on Sunday, October 11th, 1953, the day after the closing of the VI International Congress of Leprology, at the Escuela de Estomatologia, Ciudad Universitaria, Madrid.[1] Immediately preceding the meeting, scheduled for 9:00 a.m., the agenda was considered at a Council meeting attended by nine of the thirteen Councillors (general or sectional) who had attended the Congress. Dr. James A. Doull, medical director of the Leonard Wood Memorial, was also present by invitation. The general meeting itself, presided over by the president, Dr. H. W. Wade, was attended by a great majority of the Association members who had been present and was the largest in the history of the organization.

Reports rendered.—The first item on the agenda was the reading of the reports of Dr. E. Muir as General Secretary and General Treasurer, and that of the Editor of the INTERNATIONAL JOURNAL OF LEPROSY. (The last was presented verbally, the version included here having been supplied later.)

REPORT OF THE GENERAL SECRETARY

The last general meeting of the Association was held in Havana on Sunday, April 11th, 1948, at the end of the Vth International Leprosy Congress. Presided over by the president, Dr. H. W. Wade, most of the members attending the congress were present. The minutes are in the Havana Congress number of the *International Journal of Leprosy* [**14** (1948) 245-253], and I shall refer only briefly to the matters considered.

1. The Chairman referred to the members who had died since the last congress, making special reference to Dr. Faget.

2. The General Secretary-Treasurer, Dr. E. Muir, read his reports as Secretary and as Treasurer, which were approved.

3. The report of the Editor was read and accepted. A special vote of thanks to the Leonard Wood Memorial was moved and adopted, and one to the editorial staff.

4. Certain amendments to the constitution were adopted, among which were provisions that the Association should seek affiliation of scientific and other societies and organizations working in leprosy which are approved by the Council. It was also resolved that the Association should establish relations with the World Health Organization.

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[1] The first such meeting was held at the Cairo congress in 1938, the second—not previously scheduled, held in place of the one which was to have been held in Paris in 1943—at the Second Pan-American Leprosy Congress held in Rio de Janeiro in 1946, and the third at the Havana congress in 1948.

5. Mention was made of the formal invitation received by the Association from the Indian Government to hold the VIth International Leprosy Congress in India in 1953. However, consideration of this invitation had been forestalled because of prior action by the congress as a whole, in its final plenary session, in accepting a verbal invitation presented to it on behalf of the Government of Spain by the Spanish delegation. The General Secretary was therefore instructed to write to the Government of India expressing appreciation of the invitation and informing them of the action taken by the Congress.

6. Dr. Wade was confirmed as President of the Association, and Dr. Muir was re-elected as General Secretary-Treasurer. The nominations of General Councillors of the Association and Section officials, as proposed by Councillors present, were approved and they were declared elected.

7. The newly elected Officers and Councillors present, at a meeting held immediately after the general meeting, re-elected Dr. Wade as Editor of the *International Journal.*

I have now to report the following actions that have been taken since the Havana Congress.

1. *Amendments to the constitution and by-laws.*—Certain further amendments were found necessary and were proposed as a referendum in the *Journal,* **16** (1948) 472-475. These changes, having met with no objection, were included in the revision of the constitution and by-laws which was later published in the *Journal* **17** (1949) 415-423.

2. *Relationship with WHO.*—Action was taken to implement the resolution of the general meeting at Havana, in which the President and General Secretary were authorized to negotiate with the World Health Organization regarding recognition of the Association as its advisory body on leprosy matters. On November 2nd, 1948, at its second session, the Executive Board of WHO adopted a report of the Standing Committee on Non-Governmental Organizations which recommended that WHO establish relationship with, *inter alia,* the International Leprosy Association.

The Association was represented by Dr. R. Chaussinand at the Second World Health Assembly, in 1949, and at the Third Assembly, in 1950. Dr. Wilson Rae was designated to represent the Association at the Fourth Assembly, in 1951, and your General Secretary was present at the Fifth Assembly, in 1952. There was no representation at the Assembly held this year.

The Association also was represented by Dr. Chaussinand at a meeting in Brussels at which was formed, under the sponsorship of WHO and UNESCO, the Council of International Organizations of Medical Sciences, the I.L.A. being one of the 38 international medical groups that were the foundation members of that Council. Particulars of these proceedings can be seen in the *Journal,* **16** (1948) 468-472 and **17** (1949) 103-106.

The World Health Organization more recently appointed a consultative panel of leprosy experts from among members of the Association. They also called a meeting of an Expert Leprosy Committee, whose members were selected from that panel, the meeting being held in Rio de Janeiro and São Paulo in November 1952, at the invitation of the Government of

Brazil. The conclusions of this committee, by action of the last World Health Assembly, have been published as WHO Technical Reports Series No. 71. A number of copies of that report have been made available to members of the present Congress, and others will be supplied on request.

3. *Affiliated organizations.*—The following organizations have sought and received affiliation with the I.L.A.:

1. British Empire Leprosy Relief Association, London.
2. Mission to Lepers, London.
3. Hind Kusht Nivaran Sangh, New Delhi.
4. American Leprosy Missions, Inc., New York.
5. Federação das Sociedades de Assistencia aos Lazaros e Defesa Contra a Lepra, Rio de Janeiro.
6. Patronato de Leprosos de la República Argentina, Buenos Aires.
7. Societe contre la Lèpre de Meshed, Teheran.
8. Associação brasileira de Leprologia, Rio de Janeiro.
9. Japanese Leprosy Association, Tokyo.
10. Sociedad Cubana de Leprologia, Havana.
11. Indian Association of Leprologists, Calcutta.

These bodies by this affiliation are indirectly connected through the Association with the WHO, and are able to take a part in the wider campaign for the amelioration and control of leprosy throughout the world. The annual subscription of affiliated organizations, approved by the Council of the Association, is either $10.00 or $25.00.

4. *Proposed change of structure of the Association.*—When the I.L.A. was founded it was not anticipated that international congresses could be arranged, but it was thought possible to organize regional conferences in connection with other medical meetings. For this purpose the Association was divided into Eastern and Western Sections, each with Office Bearers and a Council. These Sections, however, in the more than twenty years of their existence have never functioned as such in any way. On the other hand, several regional bodies outside the I.L.A. organization (although their organizers were chiefly members of the Association) have held conferences which have done work of very considerable value. Among these regional conferences may be mentioned the Pan-American Conference at Rio de Janeiro (1946) and Buenos Aires (1951), and the All-India Conferences held yearly in different parts of India. Since the Sections of the Association have never functioned as such and are not likely to do so in future, it has been agreed by the Office Bearers and Councillors of the Association that they should be abolished, and proposals for amending the constitution and by-laws in this respect are before the present meeting. Other, lesser changes are also proposed, including one which if approved will permit re-election of the President and Vice-Presidents by two-thirds majority vote.

5. *Invitation from India.*—I am glad to be able to report that the Association has received from the Indian Government, through their High Commissioner in London, the following invitation to hold the VIIth International Leprosy Congress in India:

"I am directed by the High Commissioner to state that an invitation to hold the 1953 International Leprosy Congress in India was extended, on behalf of the Government of India, to the International Leprosy Associ-

ation by the Indian delegate who attended the 1948 Congress at Cuba. The Association, however, decided to hold the 1953 Congress in Madrid. Recently, the Association had enquired whether India would be prepared to renew its invitation to hold the 1958 Congress in India. I am glad to say that the Government of India is happy to extend a most cordial invitation to the Association to do so. I shall be grateful to know, in due course, the decision of the Association in this respect."

I have replied thanking the Government of India, and saying I shall put their invitation before the present meeting for decision.

REPORT OF THE GENERAL TREASURER

I should explain that this statement of receipts and payments from 1st January, 1948, to 30th June, 1953, deals only with sums received and paid in London. The subscriptions and other amounts received in the U.S.A. do not enter into this account.

During this period of five and one-half years the chief income was from subscriptions of members and payments on account of the *International Journal* by non-members. For most of the period the subscription charged was $5.00 for those in the dollar area, and £1.1.0 in the soft currency areas, that having been the approximate rate of exchange between the two currencies at the time when the Association was formed in 1931. At the beginning of this present year the subscription rate for those in the non-dollar areas was raised, by agreement of the General Council, to the actual present equivalent of $5.00, as has been explained in the *Journal*, **20** (1952) 538.

As all members are aware, the chief expenditure is on the *Journal*; but only a small part of the actual cost of its production is met from the Association's funds. The main amount is paid by the Leonard Wood Memorial.

The accompanying account shows members' subscriptions received in London amounting to £397.9.5., non-member subscriptions amounting to £131.0.4., and one life member subscription of £100 (by Dr. John Lowe), the total being £628.9.9. Subscriptions from six affiliated societies who have paid (out of the eleven listed in the Secretary's report) amount to £63.8.10. Sales of spare copies of the *Journal* brought in £1.3.11. A grant of £177.2.0. was received from the Council of International Organizations of Medical Sciences (CIOMS) as aid to the Association in the organization of the present Congress. Also, £5.18.1. was received through the sale of Dr. Souza-Araujo's re-publication of the Atlas of Leprosy of Danielssen and Boeck (£175.4.8. having been received on this account in previous years). This makes a total of £876.2.7. which, with the credit balance carried over, amounts to £1,307.10.6.

On the expenditure side, the sum of £610.12.6. was transferred to the Leonard Wood Memorial, for the account of the *Journal;* £69.4.7. was spent on sending the representative of the Association to the Second and Third Assemblies of the World Health Organization; the office and secretarial expenses amounted to £174.5.11.; a subscription for one year of £5.7.0. was paid to the CIOMS; and £27.13.8. of the grant from the CIOMS was spent in meeting expenses of the organization of the Congress. These expenditures (including the amount sent to the United States) amount to £887.3.8., and leave a balance in the bank of £420.6.10.

Mention has been made of the disproportion between the price paid for membership, including the *Journal*, and the actual cost of publishing the *Journal*. Since the *Journal* was first published in 1933 the price of production has increased greatly. On your behalf I would like to voice the appreciation of the Association to the Leonard Wood Memorial for their generosity in continuing to support the periodical. I think, however, that all members appreciate its excellent quality and great usefulness, and the important role that it plays in the world-wide fight against leprosy. It is surely time that something more should be done to bridge the gap between income and expenditure, and I am sure that members would be willing to express their appreciation of the *Journal* by paying larger membership subscriptions to the Association.

I cannot end without expressing our deep gratitude to Dr. Wade, who has done so much for the Association, as editor of the *Journal* for the 20 years of its existence except for the war period, and in addition as President of the Association during the last seven years.

General Secretary-Treasurer's Statement of Receipts and Payments from 1st January, 1948 to 30th June, 1953

RECEIPTS

Dec. 31, 1947

		£. s. d.
To Balance brought down		x 431. 7.11.
To Subscriptions—Members	£397. 9. 5.	
Non-Members	131. 0. 4.	
Life Member	100. 0. 0.	628. 9. 9.
To Subscriptions from Affiliated Societies		63. 8.10.
To Sale of spare copies of the Journal		1. 3.11.
To CIOMS Grant for Madrid Congress		177. 2. 0.
To Sale of Leprosy Atlas (de Souza-Araujo)		5.18. 1.
		£1307.10. 6.

x Araujo Fund £175.4. 8.
General Fund 256.3. 3.
£431.7.11.

PAYMENTS

		£. s. d.
By Sums transferred to U.S.A. (For Journal)		610.12. 6.
By Expenses of Representative to W.H.O. Assemblies		69. 4. 7.
By Office Expenses. Salaries	£120. 0. 0.	
Postage & Sundries	38. 8. 2.	
Printing & Stationery	15.17. 9.	174. 5.11.
By Subscription to CIOMS (1950)		5. 7. 0.
By Madrid Congress—Expenses from CIOMS grant		27.13. 8.
		887. 3. 8.

By Balance in Bank	x 420. 6.10.
	£1307.10. 6.

x Araujo Fund	£181. 2. 9.
General Fund	239. 4. 1.
	£420. 6.10.

REPORT OF THE EDITOR

The undersigned resumed editorial responsibility for the *International Journal of Leprosy* at the beginning of 1948, Dr. James A. Doull having served in that capacity, assisted by Dr. Huldah Bancroft, during the six-year period from 1942 through 1947, in which year quarterly publication was resumed. Dr. Bancroft has continued as Assistant Editor, in charge of the publication office at Tulane University School of Medicine in New Orleans, where she had transferred from Western Reserve University.

The present report covers a period of five full years, from Vol. 16, 1948, to Vol. 20, 1952, inclusive. Each volume has run considerably more than the intended 500-page minimum. Not counting the front inserts but including the indexes, the volumes ran: 1948, 551 pages; 1949, 553 pages; 1950, 586 pages; 1951, 551 pages; and 1952, 602 pages; total, 2,843 pages.

We have continued to receive satisfactory support in the matter of manuscripts submitted for publication as original articles, as in other respects. As previously, *the Journal* has each year reprinted a limited number of selected articles. The total of articles run—including, in 1948, several which had been presented at the Havana congress—is 162, or an average of 34 per year or 8.5 per issue, of which 128 were original and 34 were reprinted. Roughly classified, the break-down of this material is as follows, the figures in parentheses being for originals and reprintings, respectively: clinical, including classification, 27 (18 + 9); treatment, 40 (32 + 8); epidemiology and control and related material, 24 (22 + 2); immunology and serology, 19 (16 + 3); bacteriology, 9 (7 + 2); pathology, 18 (16 + 2); other topics, including biochemistry, murine leprosy (all phases), and other collateral subjects, 25 (17 + 8).

With regard to editorials, the policy was adopted early in this period of soliciting one such article for each issue from the Associate Editors, in rotation, the subjects to be chosen by them; and, twice, editorial notes have been solicited from others. The following have made such contributions to the total of 35 editorials published: Dr. R. Chaussinand, 3; Dr. R. G. Cochrane, 3; Dr. J. A. Doull, 1; Dr. E. Muir, 4; Dr. V. Pardo-Castelló, 3; and Dr. J. N. Rodriguez, 1. Certain minor items regarding the Association and the *Journal* are not included in these figures.

Activity in the correspondence department has varied much from time to time, but in only one issue since the middle of 1948 has that section not appeared. Most of the items, counting by subjects, were unsolicited. The others were replies to inquiries sent out to one or more persons, these including "symposia by correspondence" on "Lucio" and "lazarine" leprosy (5 contributions); accidental exposure to infection (12 contributions); the pharmacology of the sulfones (6 contributions); and classification (20 contributions). Including these symposia there were in total 48 subject-

items and 91 contributors—or, better, contributions, since any item signed by two or more persons is counted as one. The responses to an inquiry made early in the period indicated considerable reader interest in the symposia, but they are time-consuming and not as many have been worked up as was planned at that time.

A considerable amount of attention is given to the news and notes department in an effort to obtain wide coverage of noteworthy events and developments, and a total of 351 pages was devoted to this material. Not counting the 68-page report of the Havana congress, the average per issue was 14.9 pages. Contributions of such material by our Contributing Editors have been helpful, if unfortunately limited.

It is in connection with the important current literature department that our Contributing Editors have been most cooperative. In 1949 the plan was adopted of routinely sending to them reminders about articles of which information is gained from exchange periodicals and otherwise, they to decide which are worth abstracting. The response on the whole has been good, as indicated by the sources of the total of 1,046 abstracts published—not counting the Havana congress material (195 abstracts and 43 titles).

Sources	*1948*	*1949*	*1950*	*1951*	*1952*	*Total*
Copied abstracts [a]	104	41	32	48	35	260
Copied summaries [b]	17	15	24	57.	76	189
Prepared by the Editor [c]	18	25	45	40	43	171
From Contributing Editors [d]	(3)34	(14)82	(9)73	(15)115	(16)112	(21)416
From others	1	3	2	0	4	10
Total	174	166	176	260	270	1046

a From abstracting periodicals.
b From the original articles.
c Including items on collateral subjects.
d Figures in parentheses indicate the numbers of individuals contributing.

The largest numbers of abstracts were supplied by Drs. Dharmendra and Mukherjee together (66), Johansen (63), Chaussinand (50), Teichmann (43), Contreras (38), Floch (35), and Basombrio (32). Three contributors, Drs. Dubois, Tiant, and Nolasco, supplied 17, 15 and 13, respectively. Eleven others supplied between 1 and 9 each. These smaller numbers do not indicate less assiduity for almost all of the persons concerned represent regions where few articles on leprosy are published.

During this period, also, 20 book reviews were published, of which 7 were contributed and 7 were copied. It has been found necessary to discontinue publishing lists of references of articles not abstracted.

An expression of appreciation is due all those who have aided in the procuring of material. Recognition is also due Dr. Huldah Bancroft and her editorial assistant, Miss Bess LeFevre, for upon them falls the entire task of seeing the issues through the press and into the mail, and also the preparation of the indexes.

The Leonard Wood Memorial has continued to subsidize the *Journal* with respect to the deficit between income and actual publication costs and otherwise, as a contribution to progress in leprosy work. The expense,

however, has increased to a point where thought must be given to ways by which the financial burden on the Memorial may be lessened.

—H. W. WADE

Changes in the constitution and bye-laws.—The proposed changes, referred to in the report of the Secretary, had been circulated by mail earlier in the year to all Office Bearers and Councillors and had met with no disagreement. They had also been multigraphed and, as required, distributed before the meeting. In brief, the principal proposal was that the Sections should be done away with, there to be one group of Office Bearers and Councillors for the organization as a whole; that the two Vice-Presidents to be elected as such, instead of being such *ex officio* as Chairmen of the Sections; and that the number of elected Councillors be increased to fifteen. This change would entail many minor alterations in the constitution and bye-laws, in terminology and otherwise. Other proposed changes of the former involved provision for re-election of the President and Vice-Presidents (by two-thirds majority vote); clarification regarding affiliation of other organizations; modification of provisions for referenda, restricting changes to general meetings; and provision for sustaining memberships. Also proposed were certain alterations of the bye-laws, including the change of annual dues—already in force by agreement—from "five dollars (U.S.) or one guinea" to five dollars or the equivalent thereof in sterling.

These proposals were accepted without change.

International Journal of Leprosy.—On invitation by the Chairman the matter of increased cost of publishing the *Journal* was presented by Dr. Doull, representing the Leonard Wood Memorial. The cost to the Memorial had increased, he said, from about $4,000 a year before the war to around $9,000 a year (apart from any evaluation of the time devoted to *Journal* work by the Editor). He suggested four things that might help to decrease cost: (1) that Association members and other subscribers should make payments direct to the *Journal* office in New Orleans, and not through agencies whose commissions lessen the income; (2) that the *Journal* might carry advertisements, although the prospects for much income from that source are not bright; (3) that, as in various other such societies, members might be encouraged to enroll as Sustaining Members at $25 a year, their names to be entered in each number of the *Journal,* this perhaps to be extended to other organizations and

even commercial firms; and (4) that the dues of members might be increased. Alternatively, he suggested, the cost could be diminished by decreasing the size of the periodical.

In discussion, a general feeling was evidenced that the dues should be increased. One proposal offered from the floor was that there be two rates of subscription for members of different circumstances, but that was negatived as impracticable. It was agreed that the matter should be left to the discretion of the executive body after consultation with representatives of the Memorial.

The next congress.—Before the Congress was convened, as stated in the Secretary's report, the Government of India had —on solicitation—renewed its invitation for the next congress to be held in that country, in 1958. During the congress week another official invitation had been received from the Government of Japan, through its Ambassador to Spain. It was unanimously agreed to accept the invitation from India. A resolution was passed thanking the Japanese government for its invitation, and expressing hope that it might be renewed at the time of the next congress.

Election of officers and councillors.—The Secretary presented the nominations which had been approved by the preliminary Council meeting, they being conditioned on approval of the proposed changes of the constitution and bye-laws. These were as follows:

Officers

Dr. H. W. Wade, *President*
Dr. Dharmendra, *Vice-President*
Dr. R. Chaussinand, *Vice-President*
Dr. John Lowe, *Secretary-Treasurer*

Councillors [1]

Dr. E. Agricola
Dr. S. N. Chatterjee
Dr. R. G. Cochrane
Dr. F. Contreras
Dr. T. F. Davey
Dr. A. R. Davison
Dr. J. A. Doull
Dr. A. Dubois
Dr. J. M. M. Fernandez
Dr. N. D. Fraser

[1] This list does not include the Editor of the *Journal*, who if not elected personally would be a member *ex-officio*.

Dr. K. Kitamura
Dr. E. Muir
Dr. J. N. Rodriguez
Dr. H. C. de Souza-Araujo
Dr. M. Vegas

Dr. Wade was re-elected President by acclamation. Dr. Lowe was elected Secretary-Treasurer in place of Dr. Muir, who had declined re-nomination after having served since 1935.[2] He had agreed, however, to continue to discharge the duties of the office until April 1, 1954, when Dr. Lowe will become medical secretary of the British Empire Leprosy Relief Association in London—in which office the I.L.A. has been housed since its inception. The Councillors nominated were elected without opposition.

A proposal was made that the constitution be changed to provide for three instead of two Vice-Presidents, to represent the Far East, the European zone, and the Western Hemisphere. There having been no advance notice of this proposal, it was tabled.

Other resolutions.—The meeting rose in memory of four members of the Association who had died during the past five years: Dr. Pedro L. Baliña, Dr. Gordon A. Ryrie, Dr. James L. Maxwell, and Dr. Malcolm H. Soule. A resolution was passed that the Secretary should convey to the relatives the sympathy of the members of the Association.

A vote of thanks was passed expressing to the Government of Spain gratitude for the facilities given for holding the meeting.

A vote of thanks to the Leonard Wood Memorial was passed for all the help, financial and other, given to the Association in connection with the publication of the *Journal.*

The meeting adopted [by acclamation] a resolution expressing to Dr. Muir its appreciation of his services as General Secretary-Treasurer of the Association for the past eighteen years. —E. MUIR

[2] At Havana, in 1948, Dr. Muir had proposed that he be relieved of the responsibilities of the positions, but was persuaded to serve another term with the understanding that he should not be asked to do so again.—EDITOR.