

INTERNATIONAL JOURNAL OF LEPROSY

And Other Mycobacterial Diseases

Official Organ of the
INTERNATIONAL LEPROSY ASSOCIATION
(Association Internationale contre la Lèpre)
(Asociación Internacional de la Lepra)



Contents

INTERNATIONAL JOURNAL OF LEPROSY and Other Mycobacterial Diseases

Official Organ of the International Leprosy Association

President: Wayne M. Meyers, M.D., Ph.D., Chief,
Microbiology Division, Armed Forces
Institute of Pathology, Washington,
D.C. 20306-6000, U.S.A.

Secretary: Dr. Yo Yuasa, Executive and Medical
Director, Sasakawa Memorial Health
Foundation, The Sasakawa Hall, 6F
3-12-12 Mita, Minato-ku, Tokyo 108, Japan

Treasurer: Dr. W. F. Ross, 1 ALM Way,
Greenville, South Carolina 29601, U.S.A.

EDITORIAL OFFICE

Gillis W. Long Hansen's Disease Center
Carville, Louisiana 70721, U.S.A.

Editor: ROBERT C. HASTINGS, Carville, Louisiana

Assistant Editor: DEE D. GOODMAN, Carville, Louisiana

BUSINESS AND CIRCULATION OFFICE

Executive Officer: W. FELTON ROSS, 1 ALM Way
Greenville, South Carolina 29601, U.S.A.

BOARD OF DIRECTORS

Dr. Wayne M. Meyers (President, ILA), Chairman
Dr. Thomas H. Rea Dr. M. F. R. Waters
Dr. W. Felton Ross Dr. Yo Yuasa

CONTRIBUTING EDITORS

Argentina: Dra. L. M. Olivares
(Buenos Aires)

Australia: Dr. J. C. Hargrave (Darwin)

Brazil: Dr. L. M. Bechelli (São Paulo)

France & Fr. Terr.: Dr. D. Wallach
(Paris)

India (North): Dr. L. K. Bhutani
(New Delhi)

India (South): Dr. G. Ramu
(Coimbatore)

Israel: Dr. L. Levy (Jerusalem)

Japan: Dr. M. Abe (Tokyo)

Malaysia & SE Asia: Dr. J. H. S.
Pettit (Kuala Lumpur)

Mexico: Dr. A. Saúl (Mexico, D.F.)

Netherlands: Dr. D. L. Leiker (Amsterdam)

People's Republic of China:

Dr. Ye Gan-yun (Taizhou)

Philippines: Dr. R. M. Abalos (Cebu City)

Spain: Dr. J. Terencio de las Aguas (Fontilles)

U.K.: Dr. R. J. W. Rees (London)

U.K.: Dr. M. F. R. Waters (London)

U.S.A.: Dr. P. W. Brand (Seattle)

U.S.A.: Dr. Thomas H. Rea
(Los Angeles)

U.S.S.R.: Dr. A. A. Juscenko (Astrakhan)

Venezuela: Dr. J. Convit (Caracas)

West Africa: Dr. M. Nebout (Bamako)

This JOURNAL is indexed in CURRENT CONTENTS/LIFE SCIENCES, BIOLOGICAL ABSTRACTS,
CHEMICAL ABSTRACTS, EXCERPTA MEDICA/SECTION 51 LEPROSY, TROPICAL DISEASES
BULLETIN, and INDEX MEDICUS-MEDLINE DATA BASE. Microform available from University
Microfilms International, Ann Arbor, Michigan 48106, U.S.A. or London WC1R 4EJ, U.K.

The INTERNATIONAL JOURNAL OF LEPROSY (ISSN 0148-916X) is published quarterly for \$70.00 per
year for members and \$100.00 per year for subscribers by Allen Press, Inc., 1041 New Hampshire
St., Lawrence, Kansas 66044, U.S.A. Second-class postage paid at Greenville, South Carolina, and
additional mailing office. POSTMASTER: Send address changes to INTERNATIONAL JOURNAL OF
LEPROSY, Business and Circulation Office, 1 ALM Way, South Carolina 29601, U.S.A.

**INTERNATIONAL JOURNAL OF LEPROSY
and Other Mycobacterial Diseases**

CONTENTS

Volume 58, Number 1, March 1990

Original Articles	Page
Cellona, Roland V., Fajardo, Tranquilino, T., Jr., Kim, Do-II, Hah, Yong-Ma, Ramasoota, Teera, Sampattavanich, Surasak, Carrillo, Marcial P., Abalos, Rodolfo M., dela Cruz, Eduardo C., Ito, Tonetaro, and Yuasa, Yo. Joint Chemotherapy Trials in Lepromatous Leprosy Conducted in Thailand, The Philippines, and Korea	1
N'Deli, Laurent, Guelpa-Lauras, Claire-Cecile, Perani, Evelyne G., and Grosset, Jacques H. Effectiveness of Pefloxacin in the Treatment of Lepromatous Leprosy	12
Grugni, Antonio, Nadkarni, Nitin J., Kini, Manjunath S., and Mehta, Vinay R. Relapses in Paucibacillary Leprosy After MDT—A Clinical Study	19
Bagshawe, Antonia F., Garsia, Roger J., Baumgart, Karl, and Astbury, Lyn. IgM Serum Antibodies to Phenolic Glycolipid-I and Clinical Leprosy: Two Years' Observation in a Community with Hyperendemic Leprosy	25
Tyagi, Padmawati, Ramanathan, Vadakkupattu Devasenapathi, Girdhar, Bhawmeshwar K., Katoch, Kiran, Bhatia, Amarjit Singh, and Sengupta, Utpal. Activation of Complement by Circulating Immune Complexes Isolated from Leprosy Patients	31
Lewallen, Susan, Hussein, Naushad, Courtright, Paul, Ostler, H. Bruce, and Gelber, Robert H. Intraocular Pressure and Iris Denervation in Hansen's Disease	39
Shroff, Khushroo E., Sengupta, Satya Ranjan, and Kamat, Ramesh S. Route-related Variation in Immunogenicity of Mycobacteria	44
Shroff, Khushroo E., Sengupta, Satya Ranjan, and Kamat, Ramesh S. Pathogenesis of Route-related Variation in T-Suppressor Response on Immunization with Mycobacteria	50
Shroff, Khushroo E., Sainis, Krishna Balaji, Sengupta, Satya Ranjan, and Kamat, Ramesh S. Variation in Immunogenicity of Mycobacteria: Role of Antigen-presenting Cells	58
Gormus, Bobby J., Xu, Keyu, Meyers, Wayne M., Walsh, Gerald P., Levis, William R., and Meeker, Harry C. Antibodies to Lipoarabinomannan Antigen in Sooty Mangabey Monkeys Experimentally Inoculated with <i>Mycobacterium leprae</i>	65
Ibrahim, Mohammad A., Lamb, F. Ian, and Colston, M. Joseph. Analysis of Variation in Batches of Armadillo-derived <i>Mycobacterium leprae</i> by Immunoblotting	73
Editorials	
The Need for New Drugs in the Treatment and Control of Leprosy (Richard J. Baker)	78
The 1989 JOURNAL—A Continuing Perspective (Robert C. Hastings)	98
Clinical Notes	
Influence of Social Perceptions of Leprosy and Leprosy Patients on Public Health Programs (Didier Fassin)	111
Correspondence	
Cutaneous Lymphoma Masquerading as Lepromatous Leprosy (C. Balachandran, C. R. Srinivas, S. D. Senoy, and K. Ramnarayan)	115
Single Lesion Subpolar Lepromatous Leprosy and Its Possible Mode of Origin (Virendra N. Sehgal and Sambit N. Bhattacharya)	116
Response by Dr. Job, et al. (Charles K. Job, Robert R. Jacobson, and Robert C. Hastings)	117
Relapse or Late Reversal Reaction? (Virendra N. Sehgal, Sambit N. Bhattacharya, and Sanjiv Jain)	118
Dr. Pannikar Replies (V. K. Pannikar)	120
Blister Calendar Packs for Dapsone Monotherapy (A. Colin McDougall)	121
Screening of Anti-<i>M. leprae</i> Antibodies in the Blood Samples Eluted from Filter Paper Blood Blots (Shripad A. Patil, Gopal Ramu, S. Sinha, and U. Sengupta)	123
Detection of Interleukin-2 Receptor (IL-2r) by Indirect Immunofluorescence with Anti-Tac Monoclonal Antibody on the Surface of T Lymphocytes from Patients with Lepromatous Leprosy (Mary Fafutis-Morris, Silvia Mejia-Arreguin, Amado Gonzales-Mendoza, Roberto Morales-Ortiz, and Alfonso Islas-Rodriguez)	126
An Attempt to Demonstrate Antinerve Antibodies in Leprosy Sera Using Rabbit Nerve as an Antigen (Om Parkash, Sreevatsa, and Utpal Sengupta)	129
Further Evidence for the Exclusiveness of the <i>Mycobacterium leprae</i>-specific DNA Probe (Christian Pitulle, Dagmar Witt, Erko Stackebrandt, and Jindrich Kazda)	130
Obituary	
Rabello, Francisco Eduardo	134
News and Notes	
136	
Book Reviews	
143	
Current Literature	
145	
U.S.—Japan Cooperative Medical Science Program, Twenty-Fourth Joint Leprosy Research Conference, San Diego, California, U.S.A., 1989	
180	
Index to Volume 57	
203	
Special Grantors and Sustaining Members	
271	

CONTENTS

Volume 58, Number 2, June 1990

Original Articles	Page
Thomas, Aleyamma, Balakrishnan, Appaswamy, Nagarajan, Muthiyalusamy, Prabhakar, Ramachandra, Tripathy, Sriram Prasad, Christian, Melville, and Somasundaram, Paul Rajasekharan. Controlled Clinical Trial of Two Multidrug Regimens with and without Rifampin in Highly Bacilliferous BL/LL South Indian Patients: A Five-year Report	273
Grosset, Jacques H., Ji, Baohong, Guelpa-Lauras, Claire-Cécile, Perani, Evelyne G., and N'Deli, Laurent N. Clinical Trial of Pefloxacin and Ofloxacin in the Treatment of Lepromatous Leprosy	281
Lechat, Michel F., Declercq, Etienne E., Misson, Claudine B., and Vellut, Claire M. Selection of MDT Strategies Through Epidemiometric Modeling	296
Makonkawkeyoon, Sanit, Kasinrer, Watchara, Dettrairat, Sakchai, and Vithayasai, Vicharn. Immunologic Defects in Leprosy Patients. I. Evidence of Immune Aberration of Suppressor-T Lymphocytes in Lepromatous Leprosy	302
Makonkawkeyoon, Sanit, Kasinrer, Watchara, Supajatura, Voralack, Hirunpetcharat, Chakrit, and Vithayasai, Vicharn. Immunologic Defects in Leprosy Patients. II. Interleukin 1, Interleukin 2, and Interferon Production in Leprosy Patients	311
Roche, Paul W., Britton, Warwick J., Failbus, Sarah S., Ludwig, Heike, Theuvenet, Wim J., and Adiga, Ram B. Heterogeneity of Serological Responses in Paucibacillary Leprosy—Differential Responses to Protein and Carbohydrate Antigens and Correlation with Clinical Parameters	319
Wu Qinxue, Ye Ganyun, Yin Yueping, Li Xinya, Liu Qi, and Wei Wanhuei. Rapid Serodiagnosis for Leprosy—a Preliminary Study on Latex Agglutination Test	328
Chiplunkar, Subhada V., Deshmukh, Madhubhashini V., Samson, Prabhakar D., Butlin, Ruth, Bhatki, Waman S., Chulawalla, Ramesh G., Deo, Madhav G., and Gangal, Sudha G. Natural Killer-cell-mediated and Antibody-dependent Cellular Cytotoxicity in Leprosy	334
Vachula, Mona, Holzer, Timothy J., Kizlitis, Lilia, and Andersen, Burton R. Effect of <i>Mycobacterium leprae</i> 's Phenolic Glycolipid-I on Interferon-gamma Augmentation of Monocyte Oxidative Responses	342
Cree, Ian A., Smith, W. Cairns S., and Beck, J. Swanson. A Quantitative Study of the Relationship Between Systemic and Histological Parameters of Immunity in Individual Leprosy Patients	347
Kazda, Jindrich, Irgens, Lorentz M., and Kolk, Arend H. J. Acid-Fast Bacilli Found in Sphagnum Vegetation of Coastal Norway Containing <i>Mycobacterium leprae</i> -specific Phenolic Glycolipid-I	353
Baskin, Gary B., Gormus, Bobby J., Martin, Louis N., Murphey-Corb, Michael, Walsh, Gerald P., and Meyers, Wayne M. Pathology of Dual <i>Mycobacterium leprae</i> and Simian Immunodeficiency Virus Infection in Rhesus Monkeys	358
Editorial	
State-of-the-Art Lecture	
An Ordinary Mortal's Guide to the Molecular Biology of Mycobacteria (Barry R. Bloom)	365
Correspondence	
Controlled Clinical Trials (B. R. Chatterjee)	376
Drs. Grosset and Ji's Response to Dr. Chatterjee's Comments (Jacques H. Grosset and Ji Baohong)	378
Relapses in Multibacillary Leprosy (R. N. Reddy)	379
Dr. Kurz Replies (Xavier M. Kurz)	380
Lepromatous Leprosy and Dementia (Kader N. Mohamed)	381
Triethanolamine-Induced Allergic Contact Dermatitis Over a Tuberculoid Leprosy Lesion (C. R. Srinivas, Ambarish Padhee, and N. D. George)	382
Association of Pure Red Cell Aplasia and Lepromatous Leprosy (Sara T. Olalla Saad, Irene G. H. Lorand-Metze, and Carmino A. Souza)	384
Saber Tibiae in Lepromatous Leprosy (K. Pavithran)	385
Cell Subset Analysis of Cutaneous Infiltrate in Atypic Mycobacteria Ulcerations (V. Philippe Esterre, Dominique Sainte-Marie, Roger Pradinaud, and Marie-Anne Bach)	387
Macrophage Microbicidal Mechanism (Raji Swamy)	389
A Comparison of the Ziehl-Neelsen and Kinyoun Methods in Staining Smears from Leprosy Patients (F. C. O. Fandinho, A. T. Orsi-Souza, and J. I. Salem)	389
Role of S-100 Protein as a Marker for Schwann Cells in the Diagnosis of Tuberculoid Leprosy (Charles K. Job, Vernia Drain, Angelina T. Deming, Robert C. Hastings, and Michael A. Gerber)	392
Obituaries	
Rollier, René	394
Latapi, Fernando	396
News and Notes	397
Book Review	403
Current Literature	405
Special Grantors and Sustaining Members	451

CONTENTS

Volume 58, Number 3, September 1990

Original Articles	Page
Paula Motta, Celio and Zuniga G., Manuel. Time Trends of Hansen's Disease in Brazil	453
Desai, Rajendra G. An Unusual Case of Hansen's Disease (Lepromatous Leprosy) with Circulating Anticoagulant and Macroglobulinemia	462
Abraham, Anil, Kaur, Surrinder, and Sharma, Vinod K. Acid-Fast Bacilli in Semen; Correlation with Bacterial Index	466
Scollard, David M., Suriyanon, Vinai, Bhoopat, Lertlakana, Wagner, David K., Smith, Trevor C., Thamprasert, Kamthorn, Nelson, David L., and Theetranont, Choti. Studies of Human Leprosy Lesions <i>in situ</i> Using Suction-induced Blisters. 2. Cell Changes and Soluble Interleukin 2 Receptor (Tac Peptide) in Reversal Reactions	469
Roche, Paul W., Britton, Warwick J., Failbus, Sarah S., Williams, David, Pradhan, Hira M., and Theuvenet, Wim J. Operational Value of Serological Measurements in Multibacillary Leprosy Patients: Clinical and Bacteriological Correlates of Antibody Responses	480
Hussain, Rabia, Jamil, Sarwat, Kifayet, Arnawaz, Firdausi, Fatima, Dockrell, Hazel M., Lucas, Sebastian, and Hasan, Rumina. Quantitation of IgM Antibodies to the <i>M. leprae</i> Synthetic Disaccharide Can Predict Early Bacterial Multiplication in Leprosy	491
Meeker, Harry C., Schuller-Levis, Georgia, Fusco, Francesca, Giardina-Becket, Marie-Anne, Sersen, Eugene, and Levis, William R. Sequential Monitoring of Leprosy Patients with Serum Antibody Levels to Phenolic Glycolipid-I, a Synthetic Analog of Phenolic Glycolipid-I, and Mycobacterial Lipoarabinomannan	503
Cartel, Jean-Louis, Chanteau, Suzanne, Boutin, Jean-Paul, Plichart, Regis, Richez, Patrick, Roux, Jean-Felix, and Grosset, Jacques-Henri. Assessment of Anti-Phenolic Glycolipid-I IgM Levels Using an ELISA for Detection of <i>M. leprae</i> Infection in Populations of the South Pacific Islands	512
Rapoport, B. L., Morrison, R. C. A., Sher, R., and Dos Santos, L. A Study of Autoantibodies in Chronic Mycobacterial Infections	518
Harshan, K. V., Mittal, A., Prasad, H. K., Misra, R. S., Chopra, N. K., and Nath, Indira. Uptake of Purine and Pyrimidine Nucleosides by Macrophage-resident <i>Mycobacterium leprae</i> : ³ H-Adenosine as an Indicator of Viability and Antimicrobial Activity	526
Vachula, Mona, Worobec, Sophie, and Andersen, Burton R. A Comparison of Monocyte Oxidative Responses in Leprosy Patients and Healthy Subjects as Influenced by Mycobacterial Lipid Pretreatment	534
Nair, Ishwari and Mahadevan, P. R. Antigenic Protein from <i>Mycobacterium leprae</i> Released in Macrophages <i>in vitro</i> as Indicator of Viability of Bacteria	540
Nair, Ishwari, Varadkar, Deepti, and Mahadevan, P. R. Viability of <i>Mycobacterium leprae</i> Inside Macrophages from Different Strains of Mice and Possible Genetic Control	548
Malaty, Raga, Beuerman, Roger W., and Pedroza, Lia. Ocular Leprosy in Nine-banded Armadillos Following Intrastromal Inoculation	554
Cowley, Sally A., Gschmeissner, Steve E., Negesse, Yohannes, Curtis, Jill, and Turk, John L. Major Histocompatibility Complex Class II Antigen Expression in Nerves in Leprosy; an Immunoelectronmicroscopical Study	560
Editorial	
Report of the Indo-European Community Joint Symposium "Leprosy and Other Mycobacterial Diseases," Lonavla, India, 6-9 November 1989 (S. H. E. Kaufmann and M. G. Deo)	566
Correspondence	
A Case of Borderline Tuberculoid Leprosy Presenting with Papulonodular Lesions (A. Ramachandran and Rita Laxman)	571
Leprosy Vaccines (Roy E. Pfaltzgraff)	573
Further Comments on Leprosy Vaccination (A. B. Prabhavalkar, Jayadas Chacko, and R. K. Kharkar)	573
Obituaries	
Binford, Chapman H.	575
News and Notes	579
Book Reviews	589
Current Literature	594
Special Grantors and Sustaining Members	639

CONTENTS

Volume 58, Number 4, December 1990

Original Articles	Page
Groenen, Guido, Pattyn, Stefaan R., Ghys, Peter, Tshilumba, Kayembe, Kuykens, Luk, Colston, M. Joseph, and the Yalisombo Study Group. A Longitudinal Study of the Incidence of Leprosy in a Hyperendemic Area in Zaire, with Special Reference to PGL-Antibody Results	641
Amezcuca, Maria Eugenia, Escobar-Gutiérrez, Alejandro, Barba-Rubio, José, Cázares, José Victor, Mayén, Elvira, Chávez-Núñez, Miguel, Peña, Rosa C., Rodríguez, Raudel, and Pastén, Sergio. Prospective Immunological Follow-up in Household Contacts of Mexican Leprosy Patients	651
Saha, Kunal, Chattopadhyaya, Debasish, Dash, Kalpana, Saha, Uma, Tyagi, Pradip K., Gupta, Madan M., Paraashari, Aditya, and Sharma, Amar K. Sexually Transmitted Diseases in Leprosy Patients in North and Northeastern India. A Futile Search for Human Immunodeficiency Virus Antibody	660
D'Souza, Doris, Das, Bhudev C., and Thomas, Irene M. Effects of Lepromatous Leprosy (LL) Serum Factor(s) on Normal Blood Lymphocytes	666
Vijayalakshmi, Kona, Curtis, Jill, Gschmeissner, Steve, Sibley, Susan, and Turk, John L. Effect of Presensitization with BCG and <i>Mycobacterium leprae</i> on Granuloma Formation to <i>M. leprae</i>	674
Silbaq, Fauzi, Mor, Natan, Levy, Louis, and Bercovier, Herve. The Disease of CBA and BALB/c Mice that Follows Inoculation of a Small Number of <i>Mycobacterium lepraemurium</i> into the Hind Foot Pad	681
Banerjee, Dilip K. and McDermott-Lancaster, R. Denise. Effect of Simultaneous Administration of Interferon- γ and Chemotherapy Against <i>Mycobacterium leprae</i> in Experimental Infection in Nude Mice	690
Furuta, Mutsuhiro, Obara, Akiko, Ishida, Yutaka, Harada, Nobuo, and Ozaki, Motoaki. Leprosy and Malignancy: Autopsy Findings of 252 Leprosy Patients	697
Editorial	
The Chemotherapy of Leprosy. Part 1. (Gordon A. Ellard)	704
Clinical Notes	
Cervical Perineurial Cyst, A Red Herring (Case Report) (S. K. Bansal, U. K. Dhand, N. Khandelwal and J. S. Chopra)	717
Granuloma Multiforme in India (Shiela Cherian)	719
Correspondence	
Remarks on Criterion of Nerve Function Alteration as a Sign of Relapse in Leprosy Patients During Surveillance or Postsurveillance Periods (Yohannes Negesse and Tivadar L. Miko)	722
Anti-Cardiolipin Antibodies in Mexican Lepromatous Leprosy Patients (Alejandro Escobar-Gutiérrez, M. Eugenia Amezcua-Chavarria, Sergio Pastén, Eduardo Castro, Octavio Flores, and Obdulia Rodríguez)	723
Trichosporon beigelii Infection in Hansen's Disease (Rama Ramani, Chakravarthy R. Srinivas, Ambarish Padhee, and P. G. Shivananda)	724
Isolation and Identification of a Substance from Serum of Leprosy Patients (E. Garcia Lima and C. J. Laura)	726
New Findings on the Mode of Entry of <i>Mycobacterium leprae</i> in Nude Mice (Charles K. Job, Sumir K. Chehl, and Robert C. Hastings)	726
Obituary	
Hanks, John H.	730
News and Notes	731
Book Reviews	734
Current Literature	736
Reviewers	773
Statement of Financial Condition	774
Statement of Ownership, Management and Circulation	777
Special Grantors and Sustaining Members	778
Index to Volume 58	779