Lepr Rev (1989) **60** 84–85

Book Reviews

The pathogenesis of leprosy and related diseases. **D S Ridley**

Leprosy, tuberculosis and leishmaniasis are granulomatous diseases which continue to pose a very serious health problem in the world. They are caused by slow-growing intracellular parasites which reside chiefly in host macrophages. Each is a disease with a spectrum of clinical, histological and microbial manifestations determined by the immunological status of the host. So, although leishmaniasis is due to a group of protozoa, whereas leprosy and tuberculosis are each caused by a species of mycobacteria, there is obvious merit in considering the three together when dissecting out the factors determining the course of such infections.

By adopting such an approach in this book, Dr Ridley emphasizes recurring themes in the pathogenesis of these granulomatous diseases, such as the role played by the host's innate and acquired resistance, the antigenic load, the site of antigen and the immunogenicity and cytotoxicity of the aetiological agent.

At the same time as being a very interesting discourse on comparative pathology, Ridley's book offers an extremely thorough account of the histological diagnosis and classification of leprosy. This is to be expected, since he is undoubtedly the world's greatest authority on this aspect of leprosy and, together with Jopling, defined the five-group classification upon which all subsequent advances in leprosy research have been based.

Although, regrettably, the numerous histological pictures are in black and white, the book is well presented and logically subdivided, making it easy to follow. Ridley is careful to familiarize the reader with, for example, the nature of the immune response and of normal skin and nerve, before launching into detailed histopathological descriptions.

This book is not intended to be, and should not be approached as, an exhaustive account of all aspects of leprosy and related diseases, but it has to be the definitive text on its chosen subject area. As such, it should be read by all those interested in granulomatous diseases.

Sally A Cowley

Published by Wright (Butterworth Scientific) London, 1988. Price: £60, 250 pp.

Tuberculosis and leprosy. **Editor: R J W Rees**

With an estimated 12 million leprosy patients in the world and an annual incidence of 10 million cases of tuberculosis, these mycobacterial infections remain very high on the list of communicable diseases.

The fields of tuberculosis and leprosy research have always been closely linked, but today more than ever, our understanding and management of these diseases are progressing hand-in-hand. New technologies have been applied to mycobacterial research with interesting and far-reaching results and applications. Most notable among these are the production of antimycobacterial monoclonal antibodies; the development of immunodiagnostic assays; the production of recombinant mycobacterial proteins; and the establishment of antigen-specific T cell clones.

Chemotherapy employs some of the same drugs in leprosy as in tuberculosis and, with increasing problems with resistance, the push for new drugs is relevant to both diseases. The efficacy of BCG as a protection against both tuberculosis and leprosy is being carefully evaluated as efforts to develop new vaccines proceed.

This volume is, therefore, a very timely review of the state of the art of these various paths of research. With chapters written by recognized experts in the fields it offers up-to-date information and well-referenced accounts of recent research developments. It covers the broad subject areas of molecular biology, microbiology, immunology and epidemiology very thoroughly. There are also chapters on pathology and disease management which, of necessity, consider the diseases separately.

The volume concludes with a chapter on mycobacterial infections and AIDS. This is a subject of obvious growing importance where much of our present knowledge of the mycobacteria involved in opportunistic infections in AIDS has been an offshoot of research into leprosy and tuberculosis.

Some subject areas are conspicuous by their absence—not least is any contribution on nerve damage in

leprosy—though whether this was an oversight, or deliberate because of the lack of progress in research, only the planning committee of this volume will know.

Every mycobacterial research worker should regard this book as an invaluable review of the most interesting developments in the subject. For those new to the field, including those working with mycobacteria in association with AIDS, it will serve as an excellent general introduction to a diverse and often rather paradoxical branch of research.

Sally A Cowley

Published by Churchill Livingstone, Edinburgh, 1988. Price: £22·50.

The Global Impact of AIDS. Editors: A F Fleming, M Carballo, D W FitzSimons, M R Bailey and J Mann

This publication reports the proceedings of the first International Conference on the Global Impact of AIDS held in London in March 1988. There have been many publications on the virological and immunological aspects of AIDS. This volume faces up to the epidemiological and sociological aspects of the problem. As such, it is important reading for all leprosy field workers in AIDS endemic areas, particularly in Africa, although it may be but a short time before leprosy workers in other continents will be equally in need of the information conveyed in this book.

The book contains 52 individual contributions. An indication of its pointer towards leprosy is the fact that the fourth chapter is entitled, 'The effects of the AIDS epidemic on the tuberculosis problem and tuberculosis programmes' and states in summary 'There is now evidence of an increased rate of progression from asymptomatic to overt tuberculosis for persons co-infected with HIV. There are early trends suggesting an increased number of cases in some regions where both infections are common.' It also expresses concern about possible altered safety or efficacy factors in the current anti-Tb practices.

A few chapter headings will give an idea of the scope of this book: 'HIV and international travel'; 'AIDS and family planning programmes'; 'The direct and indirect cost of HIV infection in developing countries'; 'The cases of Zaire and Tanzania'; 'The impact of human immunodeficiency virus and AIDS on a primary industry: Mining (a case study of Zambia)'. There is a whole section on the impact of HIV infection on family life including the burden in Africa particularly on the aged grandmother who has to become the wage earner or food producer.

Then there is a section on the response of different countries to the problem. This includes public health organization and new legislation. The role of education is emphasized as an important public health measure.

A problem familiar to leprosy workers is that of stigma. Here at least the disease is not on the surface for everyone to see, but the ethical problems associated with HIV testing have a familiar ring. As well as the direct effect of HIV on the surrounding population in a leprosy endemic area, many of the problems that the HIV worker is facing or about to face are the same as, or similar to, those that have been faced by leprosy workers for many years, decades, even centuries.

J L Turk

Published by Alan R. Liss Inc., New York, 1988. Price: $29.50.

Leprosy—a learning package. The Wellcome Tropical Institute

The learning package consistes of a handbook and set of 10 posters. The posters are elaborately produced on thick glossy paper that can be rolled up and easily transported. They are highly coloured.

The handbook reproduces the photographic material of the posters with considerable up-to-date written material. It is also a highly glossy production. The material is well explained and easy to understand and will be particularly useful to those teaching medical students and paramedicals. The tables and diagrams are good as are the clinical photographs. The sections on MDT, vaccines and immunopathology are well covered, as also is disability control and rehabilitation.

This package will be found particularly useful in educating medical students from the developed countries and in making them aware of the problems of leprosy. It is to be hoped that funds will be made available for its distribution to medical schools, and centres for the training of paramedicals in leprosy endemic areas.

J L Turk

Published by The Wellcome Tropical Institute, London, 1988. Price: £55.

The All Africa Leprosy and Rehabilitation Training Centre (ALERT) has the following vacancies:

CLINICAL RESEARCH CO-ORDINATOR

Requirements:

1 Medically qualified.
2 Experience in clinical leprosy and clinical research preferably a Post-graduate training in epidemiology.
3 Publications of relevant articles in recognized international journals.

Date of employment: As soon as possible.
Contract period: 2 years.
Salary: Negotiable.

Address application with copies of testimonials and job certificates in English to: Executive Director, ALERT, PO Box 165, Addis Ababa, Ethiopia.

The deadline for submitting application is 1 month after the publication of this vacancy.

★ ★ ★

CHIEF PHYSIOTHERAPIST

Requirements:

1 Should have an internationally recognized degree in physiotherapy.
2 Advantageous to have experience in teaching.
3 Should have training or experience in management.
4 Should have practical work experience of a minimum of 4 years in physiotherapy or in a rehabilitation centre and preferably overseas experience.
5 Should have good leadership qualities.
6 Should have good command of the English language.
7 Should be innovative and be able to adapt or modify existing situations.

Date of employment: As soon as possible.
Contract period: 2 years.
Salary: Negotiable.

Address application with copies of testimonials and job certificates in English to: Executive Director, ALERT, PO Box 165, Addis Ababa, Ethiopia.

The deadline for submitting application is 45 days after the publication of this vacancy.

★ ★ ★

ORTHOPAEDIC SHOEMAKER

Requirements:

1 Basic qualifications as an orthopaedic shoemaker.
2 Should have a good command of the English language.
3 Should have a good knowledge of assessment and management of the insensitive and often deformed foot.
4 Should be a good communicator and be able to establish rapport with his co-workers.
5 Should have a minimum of 5 years working experience, preferably with overseas experience.
6 Should be innovative and be able to adopt, modify and develop footwear.

Date of employment: As soon as possible.
Contract period: 2 years.
Salary: Negotiable.

Address application with copies of testimonials and job certificates in English to: Executive Director, ALERT, PO Box 165, Addis Ababa, Ethiopia.

The deadline for submitting application is 45 days after the publication of this vacancy.

ORTHOPAEDIC WORKSHOP SUPERVISOR

Requirements:

1 Basic qualifications as an orthopaedic appliance maker, orthotics and prosthetics or orthopaedic shoemaker. Preferably both.
2 Should have a good knowledge of assessment and management of the insensitive and often deformed foot.
3 Should have a good command of the English language.
4 Should be a good communicator and be able to establish rapport with his co-workers.
5 Should have a minimum of 5 years working experience, preferably with overseas experience.
6 Should be innovative.
7 Should be able to adapt, modify and develop footwear.

Date of employment: As soon as possible.
Contract period: 2 years.
Salary: Negotiable.

Address application with copies of testimonials and job certificates in English to: Executive Director, ALERT, PO Box 165, Addis Ababa, Ethiopia.

The deadline for submitting application is 45 days after the publication of this vacancy.

★ ★ ★

PROSTHETIST

Requirements:

1 Basic qualifications as prosthetist
2 Should have a good command of the English language.
3 Should have a good knowledge of assessment and management of the insensitive and often deformed foot.
4 Should be a good communicator and be able to establish rapport with his co-workers.
5 Should have a minimum of 5 years working experience, preferably with overseas experience.
6 Should be innovative and be able to adopt, modify and develop footwear.

Date of employment: As soon as possible.
Contract period: 2 years.
Salary: Negotiable.

Address application with copies of testimonials and job certificates in English to: Executive Director, ALERT, PO Box 165, Addis Ababa, Ethiopia.

The deadline for submitting application is 45 days after the publication of this vacancy.

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++ A CIBA-GEIGY CONTRIBUTION + TO THE FIGHT AGAINST LEPROSY ++

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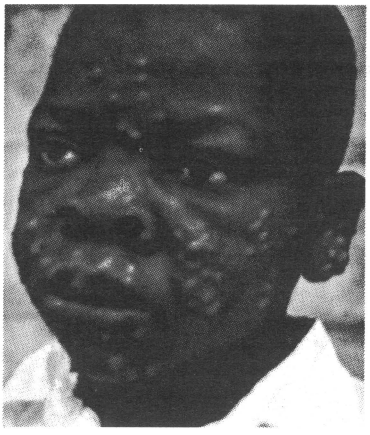

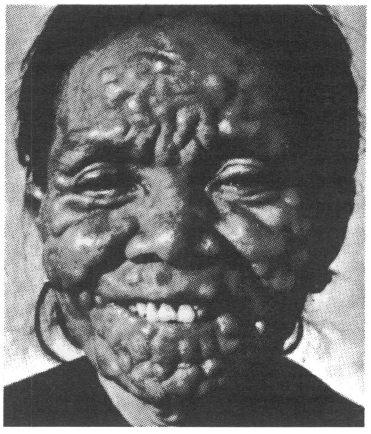

Two highly effective drugs for use in the treatment of leprosy

Lamprene
Capsules of 50 mg and 100 mg

Composition: Clofazimine. *Capsules* of 50 mg and 100 mg. Indications: Lamprene, employed in combination with dapsone and rifampicin (Rimactane), serves as treatment for multibacillary forms of leprosy, such as lepromatous (LL), borderline lepromatous (BL), and mid-borderline (BB) leprosy, as well as erythema nodosum leprosum (ENL). Combined chemotherapy is necessary in order to prevent the emergence of resistant strains of *M. leprae*. Dosage: *Adults* (of approx. 60 kg body weight): for the treatment of multibacillary leprosy (LL, BL, BB) the WHO (World Health Organisation) recommends the following dosage schedule: Lamprene: 300 mg once a month under surveillance + 50 mg once a day as self-medication. Rifampicin: 600 mg once a month under surveillance. Dapsone: 100 mg once a day as self-medication. This threefold combination should be administered for at least 2 years and, whenever possible, until such time as the skin smears become negative. If the patient develops ENL, the treatment with dapsone and rifampicin should be continued as before, whereas the dosage of Lamprene should be raised to at the most 300 mg per day. These high daily doses must not be given for longer than 3 months. *Children:* Children should receive lower doses adapted to their body weight. Administration: The capsules should be taken at mealtimes or together with milk. Contra-indication: Known hypersensitivity to clofazimine. Precautions: Leprosy patients suffering repeatedly from abdominal pains and diarrhoea, as well as those with liver or kidney damage, should if possible not be treated with Lamprene. Treatment with daily doses of Lamprene exceeding 100 mg should not be continued for longer than 3 months, and during this time the patient should be kept under medical supervision. If gastro-intestinal symptoms develop during the treatment, the dosage should be reduced or the interval between doses prolonged. In the event of persistent diarrhoea or vomiting, the patient should be hospitalised. Pregnancy and lactation: As in the case of any form of drug therapy, Lamprene should be employed with caution during pregnancy, especially in the first 3 months. Clofazimine crosses the placental barrier and causes temporary discoloration of newborn infants. The active substance also passes into the breast milk. Unwanted effects: The following side effects have been observed: Reddish to dark-brown discoloration of the skin and of the leprous lesions, particularly in pale-skinned patients at sites exposed to light. Discoloration of the hair, conjunctiva, cornea, and lacrimal fluid, as well as of sweat, sputum, urine, and faeces. This discoloration is reversible, although in the case of the skin it often does not disappear completely until some months after the cessation of treatment. Dryness of the skin, ichthyosis, pruritus, photosensitivity, acneform eruptions, and non-specific skin rashes. Nausea, vomiting, abdominal pains, diarrhoea, anorexia, loss of weight, and eosinophilic enteropathy. Storage: Protect from heat and moisture. Packages: 100 capsules of 50 mg or 100 mg. Further information is available on request.

Rimactane
Capsules of 150 mg and 300 mg

Composition: Rifampicin. *Capsules* of 150 mg and 300 mg. Indications: *Leprosy:* in combination with other antileprosy drugs as treatment for lepromatous and dimorphous (borderline) forms of leprosy, as well as in patients with other forms of leprosy, in whom intolerance of, or resistance to, other antileprosy drugs is encountered. Administration: At least ½ hour before a meal on an empty stomach according to WHO recommendations. Contra-indications: Hypersensitivity to rifamycins. Jaundice associated with reduced bilirubin excretion. Note: Daily treatment with Rimactane is generally better tolerated than intermittent therapy. Resumption of treatment with Rimactane after termination of a course of long-term therapy with the drug involves risks and should therefore, if possible, be avoided. In patients with *liver diseases,* as well as in *severely undernourished patients,* treatment with Rimactane entails a higher risk and its therapeutic benefits should therefore be weighed against the possibility of its causing further damage. If such treatment is necessary, the dosage must be correspondingly reduced. During pregnancy the use of Rimactane should, if possible, be avoided. Rimactane passes into the breast milk. Mothers in whom its use proves unavoidable should refrain from breast-feeding their infants. Unwanted effects: Gastro-intestinal disturbances; disorders of hepatic function, e.g. mild transient elevation of the transaminase values, may occur – chiefly at the start of treatment – but do not generally necessitate discontinuation of the medication; isolated occurrences of jaundice, leucopenia, and eosinophilia; particularly in patients taking Rimactane intermittently or in patients in whom daily treatment is resumed after a temporary interruption, side effects – possibly of immunopathological origin – may take the form of influenza-like symptoms ('flu syndrome) and, in rare instances, of cutaneous manifestations, thrombocytopenia, purpura, and fever, as well as of acute renal failure, dyspnoea, or haemolytic anaemia. If serious complications occur, such as thrombocytopenia, purpura, renal failure, or haemolytic anaemia, treatment with Rimactane should be stopped at once and not reinstituted at a later date. Packages: 8, 16 , and 80 capsules of 150 mg; 8 and 40 capsules of 300 mg. Further information is available on request.

1. Chemotherapy of leprosy for control programmes, Report of a WHO Study Group, WHO Technical Report Series 675 , WHO, Geneva 1982.
2. S. J. Yawalkar, J. Languillon, S. K. Hajra, A. C. McDougall, S. Gosh, D. V. A. Opromolla, C. J. S. Tonello. Once-monthly rifampicin plus daily dapsone in initial treatment of lepromatous leprosy. Lancet 1199, 29 May 1982.