

## News and Notes

### **Rifampicin pharmacology**

The latest edition of the *British National Formulary* is a useful reminder of some of the interactions and pharmacological properties of rifampicin which may be of clinical importance:

- Dapsone. It decreases plasma levels of dapsone, but in practice this is not significant in adults taking 100 mg daily.
- 2 Steroids (cortisone, dexamethasone, hydrocortisone, prednisolone and prednisone). Plasma levels are reduced in patients taking daily rifampicin this may mean that higher doses of steroid are needed, e.g. to control reactions.
- 3 Oral contraceptives. Here again plasma levels are reduced and some other, or additional, form of contraception may be indicated.
- 4 Phenytoin (an anti-epileptic). Plasma levels are reduced.
- 5 Chloramphenicol (a potent, potentially toxic, broad-spectrum antibiotic which should be reserved for the treatment of life-threatening infections such as those caused by *Haemophilus influenzae* and typhoid fever). Rifampicin reduces plasma levels.
- 6 Warfarin and nicoumalone (both anti-coagulants). Rifampicin inhibits their action.
- 7 Chlorpropamide, glymidine, tolbutamide and possibly other sulphonylureas (all anti-diabetic). Rifampicin reduces their effect.
- 8 Digitoxin (a cardiac glycoside used for some forms of heart failure). Rifampicin inhibits its effect (but not, apparently, that of other glycosides).
- 9 Quinidine and mexiletine (both used for the treatment of cardiac arrhythmias). Rifampicin reduces plasma concentrations.

It may also be helpful to add that the absorption of rifampicin may be impaired by (a) taking the drug on a full stomach (it is better before meals) or (b) the regular use of antacids, i.e. for dyspepsia. Intake (and absorption) can be checked by simply collecting a specimen of urine between 2 and 10 hours after a supervised dose has been given to see if it has a characteristic orange/red colour. Rifampicin stands humidity and changes of temperature fairly well. Its 'shelf-life' (the period between the date of manufacture and the date of expiry, which any reliable manufacturer should mark on the container) is 3 years, which should be completely satisfactory in relation to the bulk order and turnover time of drugs in most leprosy control programmes.

Copies of the *British National Formulary* are obtainable from the British Medical Association, Tavistock Square, London WC1H 9JP.

### **Action Health 2000: Medical student electives in developing countries**

We have received the following information from the Secretary, Action Health 2000, International Voluntary Health Association, The Bath House, Gwydir Street, Cambridge CB1 2LW, England. This is a voluntary charitable society concerned with health care issues in developing countries. The general purpose of Action Health 2000 is to work towards the World Health Organization's target of making health care accessible to all the world's peoples. The main work of the Society is summarized as follows:

Projects and volunteers. We provide personnel, technical and financial support for appropriate programmes.

- 2 Study and research issues related to health care in developing countries. We encourage technical collaborations on the planning, monitoring and evaluation of health care programmes.
- 3 'Awareness raising'. Action Health is committed to creating a greater awareness about the inequitable distribution of health care resources in the world, especially amongst health professionals in Britain. The Medical Students Electives Scheme is one part of this.
- 4 A forum for all. Through an international network we aim to provide a forum for the exchange of ideas, resources and expertise amongst health professionals and in so doing realise the vast potential for effective cooperation within developing countries.

#### *Medical student electives in developing countries*

All British medical schools allow an elective period in the clinical curriculum, to be used in an approved manner, but at the student's discretion. In recent years, an increasing number of medical students have ventured abroad for electives in developing countries. This has generally been a rewarding experience appreciated by the student visitors and their hosts.

Action Health 2000 organizes comprehensive Orientation Courses in conjunction with the Department of Infectious & Tropical Diseases, Addenbrooke's Hospital, Cambridge. The Course is usually over weekend (Friday to Sunday) and consists of an intensive programme of seminars, films and slide-shows. There is an opportunity to meet returned elective students and doctors/nurses who have worked in developing countries, as well as to get to know your own 'Project Supervisor'.

The topics covered in the Course include:

#### Organizational details:

Travel arrangements and insurance; immunizations; hints on fund raising for your elective.

#### Living in developing countries:

Country briefings: customs, culture, religion, politics, etc; personal health care; clothes and things to take with you; travel hints; food habits; other 'survival' hints; personal safety and security; what to do in an emergency; and communication skills.

#### Health and development:

Seminars on different aspects of primary health care; essentials of tropical medicine; development issues and related topics; comparative analysis of health care in developed and developing countries; and experiences of returned elective students.

#### Your elective:

Individual placement briefings; how to get the most out of it . . . ; hints on photography; report writing and doing a project.

Further information from the address above.

### **Arthritis in leprosy**

The *British Medical Journal*, Volume 298, 27 May 1989, carried an article on 'Clinical and laboratory studies of arthritis in leprosy' by Atkin *et al.* from the Departments of Radiology and Rheumatology, The Royal Victoria Infirmary, Newcastle upon Tyne, England and the Abou Zabel Leprosy Colony, Kaloubya, Egypt. The abstract reads as follows:

Arthritis associated with leprosy is underreported. In Egypt 66 patients from a leprosy colony were studied, 20 of whom had arthropathy. This was characterised by an inflammatory symmetrical peripheral polyarthritis. The wrist, metacarpal and proximal interphalangeal joints of the hands, the knees, and the metatarsophalangeal joints of the feet were affected with associated morning stiffness. The arthritis was erosive in 11 out of 20 patients, had no features of the arthritis associated with erythema nodosum leprosum reactions, but symptomatically responded to antileprosy treatment.

This arthritis would seem to be a previously unrecognised feature of leprosy.

The final paragraph of the discussion includes the statement:

Patients with rheumatoid arthritis have significantly raised titres of IgG and IgA binding to a 65 kilodalton mycobacterial heat shock protein. Binding to this mycobacterial antigen was reported to be greater than that seen in tuberculosis. Titres of agalactosyl IgG molecules are raised in rheumatoid arthritis and *M tuberculosis* infection but not in other diseases investigated. Both these factors may be relevant to the initiation and development of an arthritis by *M leprae*. This arthritis requires further study with a systematic survey of patients with leprosy and patients with rheumatoid arthritis, both within and between communities.

### **Handbook of leprosy, 4th edition**

Stocks of the hardback of the *Handbook of leprosy*, 4th edition (Jopling and McDougall) are running low with an estimated few months supply left. Stocks of the International Edition are a little more plentiful and are obtainable from any reputable bookseller or direct from the publisher Heinemann Medical Books, Halley Court, Jordan Hill, Oxford OX2 8EJ, England. Price £8.50 plus £2.00 postage and packing.

### **The New Internationalist, Oxford, UK**

*The New Internationalist*, a monthly journal published from Oxford, UK: 'exists to report on the issues of world poverty and inequality; to focus attention on the unjust relationship between the powerful and powerless in both poor rich and poor nations; to debate and campaign for the radical changes necessary within and between those nations if the basic material and spiritual needs are all to be met; to bring to life the ideas and the action in the fight for world development.' It was launched in 1973 as a joint venture between OXFAM and Christian Aid, but a few years later it became financially and in other ways independent. There are currently 65,000 subscribers.

The June issue includes a free copy of the Peters projection of the map of the world, showing countries in proportion to their relative sizes, based on Arno Peters' decimal grid which divides the surface of the earth into 100 longitudinal fields of equal width and 100 latitudinal fields of equal height.

Further enquiries: Wendy Slack, Subscription Services Dept, 120-126 Lavender Avenue, Mitcham, Surrey CR4 3HP, England. Editorial office: 42 Hythe Bridge Street, Oxford OX1 2EP, England.

### **Dapsone syndrome due to weekly 'Maloprim'**

Since I have seen your announcement regarding maloprim (*Lepr Rev*, 1989; **59**: 278) I have started my research on the side-effects of this drug. The following is the result of my research.

In Kisangani there is only one pharmacy which sells this product. It is a relatively expensive product (about US\$12.00). Generally it is not a popular drug and is used only by tourists and a few expatriates. None of my colleagues at the Kisangani University Clinic know of this drug. During the last few months I have found 15 people who have been using maloprim. They are from different age groups and are European or Asian in origin. Some have been introduced to this product by the local pharmacist while others have known of it already. None of the users have shown any allergic reactions. Twelve of the users were subjected to a simple complete blood count (CBC) test which yielded no special result. The usual weekly dose of maloprim is ineffective in malaria prevention for adults but it has proven effective for the prevention of malaria in children.

*A Ansari*

### **Rapid assessment of leprosy prevalence, WHO**

A recent WHO 'Report of a meeting on methods for the rapid assessment of the leprosy situation', (unpublished document WHO/CDS/LEP.88.2) held in Geneva, 15-16 April 1988 has been summarized in the *Bulletin of the WHO* (1989) **67**, No.2 and the opening paragraph runs as follows:

'Leprosy still presents a serious health issue in many countries in Africa, Asia, and Latin

America. Globally the number of cases has been estimated to be 10–12 million and this level has been repeated for more than 20 years. However, the basis for this is weak and the only reasonably reliable number available is for registered cases, which has been around 5 million for the last few years. At the national level, data about the prevalence of the disease are directly proportional to the quantity and quality of the leprosy services available. Although some countries have undertaken sample surveys to define the extent of the problem posed by leprosy, these are expensive and have been few and far between; also the relatively low frequency and uneven distribution of the disease raise further difficulties. There is therefore a need, particularly at the national level, for a simple method of estimating the prevalence of leprosy, the more so since the introduction over the last few years of multidrug therapy for the treatment of the disease.'

The report deals with the pros and cons of assessment based on: (1) prevalences in children; (2) registered cases; (3) the number of cases of disability and deformity; (4) rapid village surveys. The unpublished document should be consulted in the original, where the importance of an assessment of the methods proposed is stressed. There are however some messages in this document which could be of immediate practical importance in leprosy control programmes. For instance, one of the expert contributors, referring to French-speaking West African countries, reported that a clinical and bacteriological examination of all registered patients usually revealed that only one third of them required treatment with multiple drug therapy, thus resulting in '... a dramatic drop in the leprosy prevalence, when the numerator is made of all cases eligible for treatment'.

### **Honey for leprosy**

The *Journal of the Royal Society of Medicine*, Volume 82, 384–5, carries this interesting article 'Honey—a remedy rediscovered,' by A Zumla, Department of Medicine, Royal Postgraduate Medical School, Hammersmith Hospital, London W12 0RS, and A Lulat, Department of Medical Parasitology, London School of Hygiene and Tropical Medicine, London WC1E 7HT.

It reviews the use of honey as a traditional medicine throughout the centuries and its value as an antibacterial and antifungal agent; the treatment of infected surgical wounds; burns, decubitus ulcers; the promotion of healing in areas which would otherwise require skin grafting. The penultimate paragraph reads as follows:

'Although honey has been used for commercial and domestic uses for thousands of years, much of the literature is only descriptive. Further evaluation and application of the healing properties of honey in other clinical and laboratory situations is warranted. For example, use of it could be made in the field of leprosy. The foul smelling, chronic ulcers contribute to the social degradation and isolation of the patient. Could these be treated with this simple, acceptable and readily available remedy? Deoxyfructose serotonin, a substance derived from coffee-wax, has an anti-*Mycobacterium leprae* action and has been shown in preliminary studies to be of benefit in patients with active lepromatous leprosy. Honey obtained from beeswax contains fructose in its different forms and may possess an antileprosy effect. Effects of various components of honey on cell-mediated immunity needs evaluation'. Elsewhere attention is drawn to the fact that honey is extremely viscous, hygroscopic, contains enzymes such as catalase, and that together with its antibiotic properties, these may enable it to absorb water from surrounding oedematous tissue and clean the wound.'

Much of the information in this review article brings to mind a previous communication by L A Wiseman, Sugar as an aid to wound healing and the treatment of ulcers in leprosy, *Lepr Rev*, 1989; **60**: 67–8.

### **Leprosy in Haiti**

Although previously mentioned in this Journal, we again draw attention to an excellent publication in French, entitled *La Maladie de Hansen de Haiti*, 1988 by Professor Claude Péan, dermatologist,

dermatopathologist and professor of the Faculty of Medicine, Port-au-Prince, Haiti. It is spiral bound with laminated pages. There are 78 high quality colour photographs in this publication of 48 pages. Many of the clinical pictures are of outstandingly high quality and those on differential diagnosis, including hypochromic lesions, trichophytosis, cutaneous tuberculosis, secondary syphilis, molluscum contagiosum, psoriasis, sarcoidosis, adenoma sebaceum, neurofibromatosis, Kaposi sarcoma, mycosis fungoides, are amongst the best available in books of this kind.

A section of particular interest is that on page 35: 'Prevalence and evolution of HIV infection in leprosy patients in Haiti'. This describes a preliminary study with Cornell University, New York and a group in Haiti called Gheskio (Groupe Haitien d'Etude du Sarcome de Kaposi et des Infections Opportunistes, Port-au-Prince, Haiti). Early data are recorded and the concluding paragraph reads: 'Infact, the prevalence of HIV infections in leprosy patients is comparable to that found in the normal population. This prospective study continues. We shall know, in the fairly near future, if the natural history of HIV infection is influenced by leprosy or, if the evolution of leprosy is modified by HIV.' No price is given by the producers Institut Cardinal Leger contre la Lèpre (Fame Pereo), 130, avenue de l'Epee, Outremont, Québec H2V 3T2, Canada; and in Haiti: 160, rue Poupelard, Port-au-Prince, Haiti.

### **Ciba-Geigy Leprosy Fund, Fifth Meeting, Basle, June 1989**

Under the chairmanship of Dr Klaus Leisinger, this meeting was held in Basle in June 1989 to review progress in projects already receiving financial support and to assess the value of new applications to the Fund. In Sri Lanka, in association with Emmaus Suisse, considerable progress has been made to extend and support the national leprosy control programme in close cooperation with Dr Dewapura at the Ministry of Health. An intensive programme of health education has been carried out using written and illustrated material produced locally, and in the near future an orientation and teaching programme will be started. This will be aimed at all grades of health staff, with emphasis on case detection, diagnosis, classification and the implementation of multiple drug therapy. All drugs are issued in blister-calendar packs. In the Maldives, in association with WHO and the Maldives' Ministry of Health, a combined programme of chemoprophylaxis (with rifampicin) and multiple drug therapy is making good progress, with the aim of total interruption of transmission and eventual eradication. In Sierra Leone in association with the German Leprosy Relief Association, work continues in the northern part of the country in the implementation of multidrug therapy and prevalence figures are beginning to decline. A mobile clinic has been provided for work in Nepal and is already in operation. In association with the Damien Foundation, a prevalence study is under way in Equatorial Guinea, and in Baroda, India, funds have been allocated for drug treatment, disability prevention and the production of grip aids. With regard to new applications, the most important concerns Indonesia, where it is planned to assist leprosy control programmes in West Java and West Kalimantan, subject to some improvements in operational support and the training of staff. The use of this Fund for projects implementing, or wishing to implement multidrug therapy, according to WHO recommendations, was judged by the Committee (K Leisinger, P Friedli, S J Yawalkar, E Décosterd, P Grewal (Ciba-Geigy); H Sansarricq (France), N Chitimba (Malaŵi) and A C McDougall (UK)) to be increasingly satisfactory and no changes in the conditions for grants (already widely publicised) are to be made. The next meeting will be in mid-January 1990. Address: Ciba-Geigy, Leprosy Fund, PO Box K-24.2.09, 4002 Basle, Switzerland.

### **Women and tropical diseases; TDR Meeting, May 1989**

The following is extracted from *TDR News*, published by the UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases (TDR), No. 28, June 1989:

More questions were raised than answers could be given at a meeting on risk factors for infection and disease in women, held 1 May 1989 and organized by the Social and Economic Research component (SER) of TDR.

Questions like, 'Do women have different risks than men for infection and disease in the tropics?' And, 'At what periods of a woman's life are the risks greatest?' And 'How much do women know about their vulnerability to infection and disease?' And, 'What can women, and their local health services, do to reduce the risks?'

A number of the papers presented at the meeting, though, did give some answers. Pregnancy, for example, is clearly a risky time for a number of TDR target diseases.

Leprosy is a case in point. Scottish gynecologist Elizabeth Duncan, who has worked extensively with leprosy patients in Africa, particularly in Ethiopia, reminded meeting participants that increased estrogen levels during pregnancy lowers cell-mediated immunity. In teenage mothers, she said, 'the combined hormonal effect of puberty and the first pregnancy may be disastrous in terms of leprosy.'

With suppression of cell-mediated immunity, there is a gradual exacerbation of the disease as pregnancy progresses. Previously silent disease may become overt; women released from treatment may experience reactivation of disease, and those with mild-to-moderate leprosy may experience a worsening of the disease. 'There is a general downgrading along the leprosy spectrum,' Dr Duncan noted. This occurs in up to 45% of women.

With delivery of the baby, the woman's ordeal is not over. Restoration of cell-mediated immunity postpartum—and resumption of the battle between host immunity and leprosy bacilli—causes sometimes excruciatingly painful reactions (reversal or type I reactions) in up to 40% of women following delivery and during the early lactation period. Not to speak of the effect on the baby, 20% of whom suffer sometimes fatal fetal distress, and many of whom are of low birth weight from intrauterine growth retardation.

Dr Duncan, who is associate research gynecologist in the Department of Bacteriology, Edinburgh University Medical School, outlined the typical situation of a woman leprosy patient. 'To have two or three healthy children, she may have to have five or six pregnancies. With each pregnancy, her leprosy may deteriorate or become resistant to drug therapy and she may suffer sensory and motor nerve damage of the extremities. Ultimately, she may become debilitated to the point of being reduced to begging to earn money.'

Commenting, Dr. Shaik K. Noordeen, Chief of WHO's Leprosy Unit, said that the challenge for TDR is to find out how women with leprosy can be convinced to postpone pregnancy while they have active disease.

Contact: TDR Communications, WHO, 1211 Geneva 27, Switzerland.

### Referees—acknowledgment

The Editor wishes to extend his grateful thanks to the following referees for their assistance in the review process of papers submitted to *Leprosy Review*: Drs G. Boerrigter, P. Brand, W. Brandsma, S. Brett, A.D.M. Bryceson, M. J. Colston, J. Curtis, P. Draper, G. Ellard, Mr T. fytche, Drs R. Hastings, M. Jacob, J. Baohong, W. H. Jopling, Professor T. Lehner, Drs S. Lucas, A. C. McDougall, Miss J. Neville, Drs S. K. Noordeen, D. Palande, Professor P. Piper, Drs J. M. Ponnighaus, T. H. Rea, R. J. W. Rees, D. S. Ridley, P. Rose, T. Ryan, H. Srinivasan, J. L. Stanford, M. Waters and H. W. Wheate.

### Submission of material

Papers submitted for publication in *Leprosy Review* should be sent to the Editor, Professor J. L. Turk, LEPRa, Fairfax House, Causton Road, Colchester CO1 1PU, England. Please see inside back cover for full requirements. For material that you would like mentioned in 'Teaching Materials and Services' or 'News and Notes' please send to Jennet Batten, Assistant Editor, 94 Church Road, Wheatley, Oxon OX9 1LZ, England.

Please note that the editorial office at the Slade Hospital, Oxford is now closed.