

## Book Reviews

**Mycobacterial Diseases**, by John M Grange. No. 1 of Current Topics in Infection, 1980. London: Edward Arnold Ltd. Price £9.75.

After a general description of the genus *Mycobacterium*, with special reference to the species which are pathogenic to man and/or animals, Dr Granger goes on to describe the immunology of mycobacterial diseases, including the immune spectrum in tuberculosis and leprosy. He rightly stresses the importance of gaining a full understanding of the immune mechanisms in leprosy if an effective vaccine against the disease is to be developed for, as he says, 'any inappropriate interference with the immune response could be disastrous'. However, the statement that 'leprosy is a disease of low infectivity' is not strictly correct in the light of the high incidence of subclinical infection among leprosy contacts; it would be more appropriate to say that the rate of transmission of *M. leprae* is very significantly higher than the disease attack rate.

Clinical manifestations of tuberculosis and leprosy are described, together with their bacteriology, histology and treatment, and a chapter is devoted to other mycobacterial diseases and their therapy, including *M. ulcerans* infection (Buruli ulcer) and *M. marinum* infection (swimming-pool granuloma).

This very readable book of 115 pages contains a wealth of information and will prove of particular value to students, general physicians and research workers. It is illustrated by a dozen black-and-white photographs, and a well-chosen bibliography is provided for those who may wish to delve

more deeply into specific aspects of this complex and challenging subject.

WH JOPLING

### **Laboratory Services at Primary Health Care Level. WHO. LAB/79.1**

This WHO publication begins with the following paragraphs:

'This document follows a World Health Assembly Resolution (WHA29.74) adopted in 1976 which requested WHO to . . . "develop a programme of health technology relating to primary health care and rural development as part of the overall primary health care programme. . .". This technology also refers to applied laboratory science which should be appropriate, inexpensive, acceptable and easily handled by the laboratory personnel working at the peripheral level and in certain cases some of the tests could be carried out by other members of the health team. The laboratories will provide technical support for the preventive, curative and promotive services for both the community and the individual, shaped around the life pattern of the population.

In many developing countries, four echelons might be considered in the organization and structure of primary health care and rural development. In some countries, certain echelons might be combined (particularly 2 and 3) or simply do not exist:

- (1) At village level, health care is carried out by a village health worker, often under the monitoring of a village health committee and technically supported by the next echelons of the village services system, aimed at the total well-being of

the community. This includes the recognition, control and treatment, where possible, of important communicable diseases, child and maternal welfare, nutrition and hygiene.

- (2) Health work in a dispensary or sub-health centre, health post or clinic, which may serve several villages and be staffed by a small team of 2 or 3 health workers.
- (3) A health centre which provides support services and is part of the referral for the village and dispensary health workers. The health centre could serve a population of 5,000 to 10,000, though in some countries it covers a larger number of people. The staff could be 4 or more working closely together as a team to promote health development in the area served.
- (4) The primary level hospital, acts as the next place of referral. It receives patients requiring medical attention including minor surgery and at risk obstetrical cases and provides technical and logistic support to the health centre team. The primary level hospital may also provide training facilities for health-centre teams and village workers. In certain countries, this hospital is more developed and therefore not considered at primary-care level but at intermediate level.'

It goes on to describe the organization

of a laboratory in a health centre and to list the essential tests and methods to be used at this level. This is followed by a similar description of laboratory services at a primary level hospital, again with lists of appropriate tests and methods. The final sections deal with collection and dispatch of laboratory specimens and the training of laboratory workers for primary health-care level. There are detailed annexes on equipment, supplementary tests and reagents. The latter include one or two surprising chemicals, at least to workers in the United Kingdom. Thus o-tolidine (pp. 14 and 18) and l-naphthylamine (p. 18) are both known carcinogens; basic fuchsin (pp. 14 and 18), and gentian violet (pp. 14 and 18) are both suspect carcinogens; potassium cyanide (pp. 14 and 18), and sodium arsenite (p. 18) are both schedule 1 poisons, whilst O-toluidine, phenol, phenyl mercuric acetate, sodium azide, sodium nitroprusside (all on p. 18) and thiosemicarbazide (p. 19) are all poisonous in some degree and should be used carefully. The inclusion in this list of O-toluidine is particularly surprising, especially as the method advised on page 8 for the examination of occult blood recommends aminopyrine. Although this document loses no opportunity to stress the importance of training and supervision, the inclusion of some of the above chemicals, under the conditions described, is open to criticism.

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