

P. Jordan, G. Webbe, R. F. Sturrock (Eds.) : Human Schistosomiasis. *CAB International, Wallingford, Oxon, OX10 8DE, UK, 1993, ISBN 0885198 844 X, 465 pp.*

Long time interest for the progress in schistosomiasis, one of the most dangerous parasitic disease of the tropics, induced enormous increase of publications dealing with this worm. In 1969, the first version of "Human Schistosomiasis", a review book was published. In 1982 it was rewritten ("Schistosomiasis-epidemiology, treatment and control"), according to the great progress in drug development, and new strategies in schistosoma treatment and eradication dependent on the new developments. Since this time many new discoveries have been made, especially in molecular biology and immunology. New experience with chemotherapeutic programmes, mainly

with little effects, supports new experiments with vaccines, which remain as unsolved challenge for immunologists. Vaccine candidates, now mainly based on well defined, cloned or highly purified antigens, undergo evaluation continuously. All these facts call for a new critical evaluation of all results accumulated.

This, not simple task, is now being undertaken by three famous scientists, G. Webbe and R. F. Sturrock, who have worked in the field of schistosoma research for a long time. A new volume of "Human schistosomiasis" has been prepared by CAB International, UK in 1994.

In 11 chapters, which mostly follow the structure of previously cited books, up-to date literature, mostly up to 1993, is reviewed.

Chapter 1. The parasites and their life cycles (R. F. Sturrock). The part summarizes basic data about life cycles of schistosomes parasitising man and shortly discusses the opportunity of infection of man by animal-parasitising species.

Chapter 2. The intermediate hosts and host-parasite relationships (R. F. Sturrock). According to the relatively key importance of snails in the transmission of schistosomes attention is paid to the description of biology and distribution of mollusk genera *Oncomelania*, *Neotricula*, *Robertsiella*, *Biomphalaria*, *Bulinus* and *Planorbharius*. The biologic and abiotic factors involved in the ecology of snails are discussed.

Chapter 3. Epidemiology (P. Jordan, G. Webbe) describes new discoveries in the epidemiology of schistosomes with attention to new factors, such as irrigation projects and drug treatment actions in endemic areas.

Chapter 4. Schistosomes with terminal-spined eggs: pathological and clinical aspects (Z. Farid). This part, especially important for the clinicians and pathologists working in the endemic areas, is written very clearly, describing major and important signs of disease.

Chapter 5. *Schistosoma mansoni*: Pathological and clinical aspects (J. R. Lamberucci). Three major syndromes of schistosomiasis are discussed – i.e. cercarial dermatitis, acute schistosomiasis and chronic schistosomiasis. The description of symptoms and pathology is followed by a short outlook for the treatment. The relationships with other pathological agents (bacteria, viruses and neoplasia) are discussed.

Chapter 6. *Schistosoma japonicum* and *S. japonicum*-like infections: Epidemiology, clinical and pathological aspects (Ch. M. Gang). Similarly to the previous chapters the author uses the same structure of his review. Very little is dedicated to *S. mekongi* infection.

Chapter 7. Diagnosis (H. Feldmeier). A detailed description of diagnostic strategy for the disease, with a criticism of the imperfection in all diagnostic methods, is a main advantage of this chapter. The discussion about sensitivity, specificity and predictive value of the diagnostic test is valuable reading for all people dealing with any diagnostic problem, especially in parasitology. The part about immunodiagnosis includes all new discoveries in the field of antigen and test technology.

Chapter 8. Use of ultrasound (H. Hatz). A newly included chapter based on new knowledge about the use of portable ultrasound equipment in the diagnosis of schistosomiasis and

use in the community-based surveys. For non-specialized people minimal theoretical introduction about scanning technology has been included.

Chapter 9. Immunology of schistosomiasis (A. E. Butterworth). One would have expected a more detailed review of the role of host immunity in schistosomiasis: anyway the present chapter is very compendious and concise survey. The chapter includes a comparatively long introduction, which presents excellent reading for all people interested in the immunology of infectious diseases, not only parasitic.

Chapter 10. Antischistosomal drugs and clinical practice (A. Davis). According to progress in drug development and the experience of the treatment projects of WHO in the field, this chapter is fully rewritten. Attention has been paid to praziquantel, metrifonate, and oxamniquine as drugs of choice in topical therapy. The evaluation of therapeutic efficacy and drug resistance in schistosomiasis is discussed. A special part is dedicated to the treatment of special clinical syndromes as Katayama syndrome, neurological schistosomiasis, and "schistosomiasis without eggs".

In the last chapter 11 – Control (G. Webbe, P. Jordan) two main preventative aspects are discussed – the reduction of contact with infected water and the reduction of contamination of water with schistosome eggs. Various strategies of the use of drugs in the prevention of diseases and reduction of the rate of transmission are discussed. Both biological and engineering aspects of snail reduction are discussed with attention paid to the effectivity and economy of measures.

Altogether this volume presents a topical review about important problems, integrating thousands of papers in a journal of various orientations, prepared with necessary criticism of experienced scientists with great personal experiences in this field.

It offers comparison of the presented book with the volume "The Biology of Schistosomes" edited by D. Rollinson and A. J. G. Simpson in 1987 (Academic Press, London, UK). The main topic of the book is schistosomes. The proportion of chapters dealing with molecular biology, biochemistry, physiology is increased in comparison with chapters about epidemiology, pathology, etc. Thus if you need consultation about clinical and epidemiological problems concerning man, look to the excellent "Human Schistosomiasis". If you need more detailed information about worms, as main problems do not omit the previous book "The Biology of Schistosomes, from Genes to Latrines".

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