Disease prevention and control

Control of tropical diseases

Elimination of lymphatic filariasis

In May 1997 the Fiftieth World Health Assembly adopted resolution WHA50.29, calling for the global elimination of lymphatic filariasis as a public health problem. This initiative was based on recent advances in diagnosis, clinical understanding, treatment and control, the successes of recent control programmes, and increasing political commitment.

The control of lymphatic filariasis leading to its elimination is based on controlling transmission of the parasite and on preventing or easing the consequences of disease. Elimination can be expected in all countries where the new filariasis control strategies can be implemented.

In response to resolution WHA50.29 the global strategies have been refined and ways and means have been sought to ensure long-term support to Member States for the implementation of a global programme that is expected to lead to elimination of lymphatic filariasis by 2020. This document provides information on the disease, the proposed strategies, the technology to be used, and a donation by SmithKline Beecham PLC to support a global initiative to eliminate this major public health problem and associated socioeconomic burden.

THE PROBLEM OF FILARIAL DISEASE

1. Lymphatic filariasis, a bloodborne parasitic infection transmitted by mosquitos, is most widely recognized for causing elephantiasis and male genital damage. It is a major social and economic burden to populations living in the tropics and subtropics of Africa, Asia, the Western Pacific and parts of the Americas, affecting over 120 million people in 73 countries. Although distribution of the disease is widespread, approximately one-third of all infections are found in India and another third in Africa. The population living in areas where there is a risk of infection is more than 1.1 billion - 20% of the world’s population.

2. In those areas where the disease is well established, the prevalence of infection is continuing to increase primarily because of rapid and unplanned urbanization resulting in an increase in vector breeding sites. Thus this
disease today is a significant cause of acute and chronic illness in both urban and rural areas, affecting all age groups and both sexes.

THE FILARIASIS CONTROL STRATEGY AND ITS IMPLEMENTATION

3. Interruption of transmission can be achieved by single-dose, annual mass treatment of both those infected and the population at risk in order to eliminate the reservoir of microfilariae, and by reduction of contact between humans and vectors. The specific tools used and the time required to block transmission (generally four to six years) will depend on local parasite-vector densities and ecology, existing health care services and infrastructure, availability of financial resources, and the local culture.

4. Even when microfilariae have been eliminated in an individual, persisting adult worms and external microbial pathogens can continue to induce lymphatic pathology and secondary infection. Attending to these problems of clinical disease can effectively alleviate suffering, limit disability, and promote community collaboration in filariasis control efforts.

5. The mainstay of the elimination strategy is the use of simple, safe, inexpensive, conveniently delivered drugs that kill microfilariae and adult worms. An additional benefit of these medications is their simultaneous effectiveness against other well-entrenched diseases of the tropics and subtropics, such as intestinal worms, lice and scabies.

6. The available drugs are albendazole, diethylcarbamazine and ivermectin. Annual administration of single doses of these drugs, given in two-drug combinations, will reduce microfilarial blood counts by 99% for a year or more. Dramatic reductions in transmission have been documented in highly endemic areas even in the first year. Furthermore, both diethylcarbamazine and albendazole effectively kill a proportion of the adult worms infecting patients and thereby hasten the success of filariasis elimination efforts.

7. With encouragement and support from WHO, 13 countries have now revised their national filariasis control strategies and plans of action to take advantage of the new tools and approaches available for eliminating lymphatic filariasis. Seven of these countries have already initiated their national programmes, the largest being India, where 40 million people are targeted to receive single-dose treatment on its National Filariasis Day in early 1998.

8. It is essential that other Member States with endemic lymphatic filariasis draw up plans for appropriate treatment, monitoring, evaluation and operational research. WHO will provide, on a country-by-country basis, the necessary technical advice and support to governments for preparing such plans.

THE COMMITMENT OF SMITHKLINE BEECHAM PLC TO GLOBAL FILARIASIS ELIMINATION

9. To lend much needed support to the global filariasis elimination effort, SmithKline Beecham PLC has generously agreed to collaborate with WHO’s Division of Control of Tropical Diseases. It will donate quantities of albendazole sufficient to eliminate the disease and provide additional contributions of funds and human resources to support national lymphatic filariasis elimination programmes.

10. By virtue of a Memorandum of Understanding signed by the Director-General of WHO and the Chief Executive of SmithKline Beecham, the company will provide albendazole free of charge to WHO for use by governments and organizations working in association with them, for such duration as reasonable to achieve the global elimination of lymphatic filariasis.
11. SmithKline Beecham will furthermore contribute financial support for implementation of the lymphatic filariasis elimination programme, and provide expertise in such areas as health education and training as required.

12. WHO will establish a review group of independent experts who will provide advice on requests from governments and organizations working in association with them for free supplies of the drug and programme support.

GLOBAL PARTNERSHIPS TO ELIMINATE LYMPHATIC FILARIASIS

13. WHO welcomes the decision of the World Bank and the Arab Fund for Economic and Social Development to collaborate with the programme to eliminate this major public health problem. It invites the organizations of the United Nations system and other partners in health to join similarly in this global effort.