



ABSTRACTS OF RECENT CHINESE PUBLICATIONS ON FILARIASIS¹ (IX)

66. Sheng, Q., Xu, J.F., Li, W.B. & Fang, J.G. Epidemiological features of residual infection foci of filariasis in the controlled areas and consolidation measures. Chinese Journal of Preventive Medicine, 1987, 21 (2): 77-79 (In Chinese, with English abstract)

Following the adoption of a series of control measures, filariasis in Shandong Province was practically eradicated. A cross-sectional survey of the disease was carried out in 208 villages of 33 counties of the province in 1984-1985, and, out of a total of 152 867 persons examined by blood film, 67 (i.e., 0.04%) were found positive for microfilaremia. In addition, the re-examination of 18 075 previously positive persons in 634 endemic villages of 8 counties showed that 6 persons (i.e., 0.03%) remained positive for microfilariae. Of the counties and villages surveyed, microfilaria positive cases were found in 50.0% and 18.8% of them respectively. The distribution of cases in the residual foci of infection was sporadic, with 97% of cases occurring in previously hyper- and meso-endemic areas. The elimination of these foci and the treatment and cure of all residual microfilaria carriers would be essential for the final elimination of the disease.

67. Liu, H.Y. A study of the membrane filter concentration method in the diagnosis of filariasis. New Chinese Medicine, 1987, 18 (4): 182-183 (In Chinese)

The membrane filter concentration method using a Millipore membrane filter was compared with the routine thick blood film method for filariasis surveys (mainly Wuchereria bancrofti infections) in areas of different endemicity. The examination of 495 individuals from different areas showed that the microfilaria rates detected by membrane filter concentration were 0.4-3.2 times higher than those detected by thick film. When the same amount of peripheral blood was used, the microfilaria rate detected by membrane filter concentration was 0.4 times higher than that detected by thick film.

However, when peripheral blood collected from 8 to 15 persons was mixed and filtered as a group sample and compared with thick film examination of each individual in the positive group, the membrane filter concentration method would give a higher positive rate for much less labour. This method is therefore applicable in mass surveys or for epidemiological evaluation of control measures in areas of low endemicity.

¹ The WHO/FIL series has been chosen as a vehicle for issuing abstracts or translations in English of papers on filariasis published in the Chinese medical and scientific press as most of this material is not readily available to interested readers outside China. The numbering of the abstracts in this document is consecutive to that of the abstracts given in the previous WHO/FIL/87.181.

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Les opinions exprimées dans les documents par des auteurs cités nommément n'engagent que lesdits auteurs.

68. Deng, S.S., Xu, R.Z. & Zhao, Y. Detection of antibody in bancroftian filariasis patients with ABC-ELISA. Shanghai Journal of Immunology, 1987, 7 (3): 149-153 (In Chinese)

To study the importance of the avidin-biotin system in proving the sensitivity and specificity of the enzyme-linked immunosorbent assay (ELISA), 32 patients infected with Wuchereria bancrofti were tested for specific antibody by both avidin-biotin (ABC)-ELISA and conventional ELISA at the same time. The results showed that the positive optical density values of ABC-ELISA (0.91) was significantly higher than that of ELISA (0.54). When the positive/negative ratio was equal to or more than 1.5, it was considered as positive. The positive rates for patients by ABC-ELISA and ELISA were 100% and 75%, respectively, while none of the 52 healthy controls was positive. In conclusion, it was found that ABC could improve the sensitivity of ELISA for the detection of antibody in bancroftian filariasis patients.

69. Zhu, Q.W., Han, G.C., Chen, B.G., Zhai, C.S., Xu, X.M., Zhou, M.Y. & Wang, D. A new immunological preventive method against filariasis by dermal application of levamisole liniment. Chinese Journal of Zoonoses, 1987, 3 (4): 28-29 (In Chinese, with English abstract)

The gerbil, Meriones unguiculatus, and the horse were used to study a new immunological preventive method against filariasis. All animals received dermal applications of levamisole liniment periodically and each gerbil was then inoculated subcutaneously with 50 infective larvae of Setaria digitata per kg body weight, while each horse was inoculated with 3 larvae per kg body weight. After 45-55 days, 18 M. unguiculatus and 4 horses were reinoculated subcutaneously with the same number of infective larvae. The animals showed no signs of suffering and S. digitata could not be found in the cerebrospinal fluid of the horses nor in that of 52 out of 56 gerbils. Specific antibody and circulating antigen detected by the indirect haemagglutination test showed that the experimental animals had been artificially immunized.