

Filarial infection among population ineligible for mass drug administration (PieforM) in an endemic area: Implications for filariasis elimination program in India

Philip Raj Abraham*, Vijesh Sreedhar Kuttiatt, Krishnamoorthy K, Vijaya Kumar and Ashwani Kumar

ICMR-Vector Control Research Centre, Pondicherry

Statement of the Problem:

Lymphatic Filariasis (LF), commonly known as elephantiasis is a debilitating and severely disfiguring disease caused by helminths *Wuchereria bancrofti*, *Brugia malayi* and *Brugia timori*. Global programme to eliminate lymphatic filariasis as a public health problem is based on Mass Drug Administration (MDA) of two or three drugs. MDA is administrated to all the consenting population eligible for treatment. Pregnant women, children below 2 years of age and severely ill persons are considered as population ineligible for MDA (PieforM). The possible risk of contribution of this ineligible population as source of infection in interrupting transmission is not known. Information on the prevalence of infection in the ineligible population will be useful to address this issue from the view point of risk of transmission and their treatment. We present here the results on prevalence of infection among PieforM screened for filarial antigenemia (Ag) and microfilariae (Mf) in an endemic community under national LF elimination programme in India.

Methodology & Findings:

A total of 36 villages were selected randomly out of 235 villages in Yadgir sub-district of Karnataka State, India. Family registers used by the community drug distributors were used to identify the PieforM individuals. PieforM individuals (n=921) were screened

for filarial antigenemia using Alere Filariasis Test Strip (FTS) and all the antigen positive individuals were screened for Mf using night blood sample. High levels of filarial infection in comparison with the recommended thresholds for defining filarial endemicity in terms of antigenemia (2%) and microfilaraemia (1%) was observed in all the three categories of PieforM population. The results will be discussed during the presentation in the Conference.

Conclusion:

PieforM will be potential source of infection during the post MDA period as these populations will be never treated and missed out during the MDA. Strategies such as “test and treat” individuals or evaluate and treat the community may be useful to prevent possible resurgence of infection after stopping MDA.

Biography

Philip Raj Abraham is a Scientist-C and Head, Unit of **Molecular Epidemiology**, ICMR-Vector Control Research Centre (VCRC), Medical Complex, Indira Nagar, Pondicherry.