

13. Epidemiological Investigations

12.1. Investigation on the occurrence of Trypanosome infection in Chandrapur District, Maharashtra

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The Director General of Health Services, Government of India, constituted a multidisciplinary team to investigate the reported occurrence of a case of trypanosomiasis in Shivni village, Sindevahi taluk, Chandrapur district, Maharashtra. The team consisting of the above members carried out the investigation from 9 to 12 October 2004. Clinico-eco-epidemiologic investigations supported with laboratory findings confirmed it to be an isolated occurrence of a clinical case in whose peripheral blood smear, trypanosome were demonstrated. The findings of the investigating team, in the form of a report, were submitted to The Director General of Health Services, Govt. of India.

12.2. Investigation of alleged reactions to mass drug administration of DEC tablets in Tiruchirapalli City

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At the request of the Government of Tamil Nadu, made on 7th September 2004 to the Director, VCRC, incidents of hospitalization and death alleged to be due to the consumption of Diethylcarbamazine (DEC) tablets in Tiruchirapalli city, Tamil Nadu, following DEC

mass drug administration on September 4 and 5, 2004 were investigated. About 64 persons had been hospitalized and four deaths reported.

- Information was collected on the clinical picture, history of previous intake of DEC, consumption of DEC by other family members during the current MDA, batches of DEC distributed according to Ward/ Area of Trichy.
- Extensive literature search was carried out.
- The epidemiological profile of cases reporting adverse reactions in Trichy was carefully examined.
- Chemical analyses of the drugs distributed in Trichy were done.
- A clinical trial on volunteers from VCRC was conducted.

Our findings have been conveyed to the Director, National Vector Borne Disease Control Programme, New Delhi, Directorate of Public Health Services, Tamil Nadu and all those who were involved in the investigation.

12.3. Investigation of alleged deaths related to consumption of DEC during mass drug administration for the elimination of LF on National Filaria Day (5th June 2004) in the state of Karnataka (1 – 13 June 2004)

Dr.T.R. Khurana, RML Hospital, New Delhi, Dr.R.Ravi and Dr.S.L.Hoti, VCRC, Pondicherry, Dr.A.K.Khera, N.I.C.D., New Delhi, Dr. N.B.L. Saxena, NVBDCP, Delhi and Dr. C. Nagaraj, Regional Office of Health & Family Welfare, Bangalore.

In response to the information regarding five deaths allegedly due to DEC during mass

drug administration for the elimination of LF in Karnataka state, a team was constituted by the Directorate General of Health Services to investigate the reported deaths in Gulbarga and Bidar districts of Karnataka state. The team consisting of members listed above visited the several villages in these two districts and carried out in-depth epidemiological and clinical investigation of the reported death cases to ascertain whether these deaths could be related to mass drug administration with DEC being carried out for elimination of LF. The methodology adopted for investigation was holding discussion with state & district health officials and community health workers, MDA volunteers and Medical Officers (PHC, Taluka,

CIIC and district hospitals), visiting villages for interaction with family members of the diseased, reviewing records of hospitals and available literature and collecting relevant materials for laboratory analysis.

The detailed information collected during investigation and the available clinico-epidemiological evidence indicated that out of five reported deaths, one occurred in an adult with a history of rheumatic heart disease and another in a child with a history of head injury. The remaining three cases had presentation like acute encephalopathy syndrome. A report of the outcome of the investigation has been submitted to DGHS.