Chapter 3

Scope and plan of the Study
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Studies on the prevalence, serodiagnosis and molecular epidemiology of SSPE have been limited and scanty in India. Hence, it was necessary to undertake a large-scale study of this kind, to understand and substantiate the above criteria and the impact of the disease in India.

With this background the study was designed with the following objectives,

1. Determination of base line measles IgG Ab titre.
   i. Determination of measles IgG Ab titre in School going children (vaccinated/ unvaccinated).
   ii. Determination of measles IgG Ab titre in healthy adults.

2. Virological and serological studies of acute measles patients.

   2.1 Serological studies and isolation of measles virus from acute measles patients.
   2.2 Comparison of protein profile of antigen extracted from acute measles virus and canine distemper virus vaccine.

3. Serodiagnosis and seroprevalence study of SSPE.

   3.1 Serodiagnosis of SSPE by Indirect immuno fluorescence (IIF).
   3.2 Serodiagnosis and comparative evaluation by In-house ELISA method.
4. Molecular epidemiology of SSPE.

Molecular epidemiology studies of the measles virus have made significant contributions to measles control efforts by providing a means to identify the source and transmission pathways of the virus. Although there are relevant data upon genetic characterisation of wild type measles viruses from India, there has been no well-documented report of genotypic study of SSPE in India. Hence, the present study included,

4.1 RT-PCR for detection of measles RNA from CSF of SSPE patients and comparative analysis with Canine distemper virus vaccine

4.2 Sequence analysis of amplified PCR product from CSF of SSPE patients and genotypic studies.