

The overall objectives of the study are as follows-

1. To ascertain the usefulness of PCR methodology for routine diagnostic testing of HSV infections of the CNS in clinical specimens of patients by conventional PCR using existing and newly designed primers and their comparison with commercial kit.
2. To determine HSV genotype (HSV-1 or -2) in the study population.
3. To develop advanced PCR methodologies including the quantitative real-time PCR assay which could estimate the extent of viral replication in CNS of HSE patients which would be helpful as a prognostic marker and in monitoring HSE treatment.
4. To determine the type-common and type-specific antibody response to HSV-1 or -2 against the synthetic peptides of the envelope glycoprotein of HSV in CSF of HSE patients by ELISA.
5. To develop a more specific and cost effective antigen detection ELISA procedure in HSE. Immunologic analyses of CSF will be done by using hyperimmune sera and antipeptide antibodies so as to obtain sensitive ELISA tests for detecting the presence of whole and specific antigens of HSV.
6. To correlate the status of antigen, antibodies and viral load in initial and follow up samples of patients so as to determine the stage at which any of the moieties will have diagnostic significance.