

Age specific severity of TBE

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Baltic States are the most endemic TBE areas in Europe with 1,000-2,000 clinical TBE cases each year. The incidence of TBE in Lithuania during the last decade varied between 4.62 and 21.95/100 000.

In order to investigate the morbidity associated with TBE in the acute stage and to characterize the sequelae after TBE, a prospective follow-up study of consecutive patients with TBE was carried out at the Clinic of Infectious Diseases of Kaunas University of Medicine from June 1998 through May 1999. The study included 133 (24.3%) of 548 cases of TBE registered in Lithuania in 1998.

TBE was diagnosed by detection of specific IgM activity in serum together with clinical signs of CNS infection and pleocytosis in cerebrospinal fluid $>8 \times 10^6/l$. According to the results of this study, the highest incidence rate of TBE was found in persons older than 45 years of age. Clinical symptoms of the damage of brain parenchyma (i.e. encephalitis) in the acute stage of disease were observed in more than half of TBE patients, and in 12% of cases the disease run a severely debilitating course.

80% of patients older than 45 years of age had a moderate or severe (encephalitic) form of TBE in contrast to young adults in which a mild, meningeal form of TBE was observed in nearly 70% of cases. Permanent sequelae after 1 year were found in 30.8% of patients; in 8.5% of all TBE cases, severe disabilities required adjustment of daily activities. The risk of incomplete recovery was significantly higher among patients with an encephalitic form of TBE (OR 4.066, 95% CI 1.848-8.947).

In conclusion, the incidence of clinical TBE cases increases with age and the severity of the disease as well as the risk of contracting permanent sequelae are age-dependent.

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