

Higher Age = Higher risk for severe courses of disease

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In Germany, between 1994 and 2003, a total of 1,910 patients came down with TBE, 1,162 in Baden-Wuerttemberg alone. In 1,008 cases detailed prospective data were raised about the course of disease.

Men fell ill twice as often as women, over 90% of the infections occurred during spare time. Regarding the question of a possible age-influence on the TBE-disease the clinical progression of patients below and above the age of 50 were compared. 581 patients were between 1 and 50 years old, 427 patients were older than 50. 47 % suffered from meningitis, 43% from encephalitis and 10% had an inflammation of the spinal cord in addition.

The comparison of the individual manifestations of TBE in the individual age groups (spaced with 15 years respectively) showed a constant increase of the more severe courses of disease with age. The direct comparison of the two more severe (encephalitis and spinal cord inflammation) progressive forms in both age groups showed a significantly higher portion (65% as opposed to 43%, $p < 0.0001$) of people above 50.

The following clinical findings accordingly were significantly more frequently observed with patients above 50 than with those below: Impaired consciousness in terms of increased drowsiness or coma, delirious status displays with temporal, local and contextual disorientation, disturbance of the equilibrium, paralyse of arms and/or legs, facial paralyse, hearing disorders, dysphagia, speech disorders, disorders of respiratory regulation with the necessity for assisted artificial respiration. In addition, patients above 50 years of age were significantly more frequently attended to at an intensive care unit, hospitalisation was longer, rehabilitation measures more frequently necessary, persisting neurological dysfunctions and discomforts occurred distinctly more often in patients above 50. The mortality rate due to TBE was 15 times higher in patients above than below 50 years of age.

The increasing severity of the course of disease of TBE with advancing age can best be explained by a decreasing vitality of the immune system. The results of this study support the recommendation of vaccination experts to pay a particular attention to the sufficient protection through inoculation of those above 50. Due to the clinical findings the recommended intervals to renew inoculation, especially where older people are concerned, should always be adhered to.

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