The association of infectious agents and schizophrenia.


Source

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Abstract

OBJECTIVES:

The influence of infectious agents on the pathogenesis of psychiatric disorders has been discussed for decades. Pre- and postnatal infections are risk factors for schizophrenia. This may be explained by chronic infections or an altered immune status. However most of the studies have only focused on one single pathogen and not on the impact of different infectious agents. We investigated the association between schizophrenia and various neurotrophic infectious agents.

METHODS:

A total of 31 schizophrenic patients and 30 healthy matched individuals were included. Antibody titres of cytomegalovirus, herpes simplex virus, Epstein-Barr virus, mycoplasma, chlamydia and toxoplasma were evaluated. For statistical analysis we used Fisher's exact and Wilcoxon test.

RESULTS:

Significantly elevated positive antibody titres within schizophrenic patients were found only for Chlamydia trachomatis (P=0.005) and a trend to significance for herpes simplex virus (P=0.055). Combining the different agents, schizophrenics had a significantly higher rate of positive titres to infectious agents as compared to controls (P=0.04).

CONCLUSIONS:
The higher prevalence of antibodies within schizophrenic patients emphasizes a possible role of infectious agents in the pathogenesis of schizophrenia. Our data indicates that not one specific agent might be responsible for schizophrenic symptoms but the resulting immune response in the central nervous system.

PMID:20602604