

Autoimmun Rev. 2018 Apr 7. pii: S1568-9972(18)30088-0. doi: 10.1016/j.autrev.2018.01.009. [Epub ahead of print]

Myalgic Encephalomyelitis/Chronic Fatigue Syndrome - Evidence for an autoimmune disease.

Sotzny F, Blanco J, Capelli E, Castro-Marrero J, Steiner S, Murovska M, Scheibenbogen C; European Network on ME/CFS (EUROMENE).

Abstract

Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (ME/CFS) is a frequent and severe chronic disease drastically impairing life quality. The underlying pathomechanism is incompletely understood yet but there is convincing evidence that in at least a subset of patients ME/CFS has an autoimmune etiology. In this review, we will discuss current autoimmune aspects for ME/CFS. Immune dysregulation in ME/CFS has been frequently described including changes in cytokine profiles and immunoglobulin levels, T- and B-cell phenotype and a decrease of natural killer cell cytotoxicity. Moreover, autoantibodies against various antigens including neurotransmitter receptors have been recently identified in ME/CFS individuals by several groups. Consistently, clinical trials from Norway have shown that B-cell depletion with rituximab results in clinical benefits in about half of ME/CFS patients. Furthermore, recent studies have provided evidence for severe metabolic disturbances presumably mediated by serum autoantibodies in ME/CFS. Therefore, further efforts are required to delineate the role of autoantibodies in the onset and pathomechanisms of ME/CFS in order to better understand and properly treat this disease.