The 2nd International Neuroinflammation Congress and 2nd Student Festival of Neurosience

Shefa Neuroscience Research Center, Tehran, Iran, 17-19 April, 2018

The Neuroscience Journal of Shefaye Khatam

Volume 6, No. 2, Suppl 1

Poster Presentation

The Association between Antibasal Ganglia Antibodies of Streptococcal Infection and Neurological Conditions

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Published: *17 April, 2018*

Abstract

The outbreak of the post-streptococcal neurological disorders related to the antibasal ganglia antibodies is broadening. In addition to the disorders such as chorea and obsessive-compulsive disorder which have been recognized previously, the movement and behavioral abnormalities are the other aspects of post-streptococcal neurological disorders. Streptococcus is a positive-gram and coccus bacteria which causes disease in human. Antibasal ganglia antibodies (ABGAs) are related to the group A-beta haemolytic streptococcal infections (GABHSs). The neurological conditions such as Tourette syndrome (TS), obsessive-compulsive disorder (OCD), acute disseminated encephalomyelitis (ADEM) are associated to the increased levels of ABGAs that we can use the levels of ABGAs as a marker for recognition the origin of those neurologic conditions. It has been showed that the process of generating neurological conditions by ABGAs is an antibody-mediated process. Furthermore, There are several mechanisms for the function of the AGBAs but the underlying mechanism is that the antigens of streptococcus infections imitate molecularly the basal ganglia so that when the antibodies attack those antigens, in fact the basal ganglia are invaded by those antibodies.

Keywords: Antibody, Neurological, Disorder, Ganglia

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