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

New Findings in The Diagnosis of Autoimmune Diseases of the Nervous System

Alireza Pourreza*

Immunology Department, Mashhad University of Medical Sciences, Mashhad, Iran

Published: 17 April, 2018

Abstract

The antibody of the nervous system is called antibodies that the body makes to the nervous system cells. These antibodies are also very diverse based on the complexity and diversity of the nervous system, and therefore their detection is also associated with particular challenges. Generally, autoimmune diseases are on the rise. The diagnostic techniques for autoimmune diseases are also in progress, many of the neurological diseases previously classified as idiopathic are now in the autoimmune category. The laboratory has a special role to diagnosis of autoimmune nervous system. There is an important needs for the training of physicians, medical students, and authorities of the medical diagnostic laboratories to identify the pathways for the diagnosis of autoantibody in the nervous system. The antibody of the nervous system is divided into two general categories. Intracellular antibodies that are often tumor-dependent and cause par neoplas tic neuropsychological disorders(PNS). The other batch of extracellular antibodies is synaptic, less tumor dependent and often causes encephalitis. Simultaneous use of immunofluorescence, ELISA, immunoblotting, radioimmunoassay is performed on the basis of diagnostic protocols. In this paper, we will review the types of neuroautoanibodies, the physiological structure of their antigens, and the primary ways to detect them, and then confirmed them with applying new methods. Transaction cells with specific antigens also increase the sensitivity and specificity of the methods, which is described. The following table provides an overview of the overall categorization of autoimmune diseases in the nervous system and specific antibodies. Autoimmune encephalitis:Hu, CV2, Ma, Amphiphysin, GAD, NMDAR, AMPA, GABAR, LGI1, CASPR2, DPPX, mGluR5

Autoimmune neuropathies: GM1, GQ1b, MAG, Hu, CV2, Ma, AGNA, Amphiphysin, ANNA-3

Cerebellar syndromes: Hu, Yo, Ri, CV2, Ma, Tr, mGluR1, Zic4, Amphiphysin, ANNA-3, PCA-2, AGNA

Demyelinating diseases: AQP4, MBP, MOG

Myasthenia syndrome: AChR, MuSK, Titin, LRP4

Stiff-person syndrome: Amphiphysin, GAD, GlyR

Keywords: Autoimmune Diseases, Antibody

***Corresponding Author:** Alireza Pourreza

E-mail: *daneshlab@yahoo.com*

[Downloaded from shefayekhatam.ir on 2026-11-29]