

The potential of SEPs recordings to address Neurodevelopmental disorders in children

Sergio Zanini

Scientific Institute Eugenio Medea, Italy

Abstract

The pathophysiology of several clinical conditions in humans presents with abnormal brain cortical excitation levels. This is potentially due to either reduced cortical excitability (e.g. all conditions of depressed consciousness) or enhanced cortical excitability (e.g. migraine, epilepsy, and dystonia). We can measure the level of cortical excitability by means of different techniques; some of them are invasive, several others are not. Here we will consider the potential of somatosensory evoked potentials (SEPs) as: 1) their use is very common in ordinary clinical activity, 2) technicians are largely independent in recording acquisition, 3) their analysis and interpretation are quite fast, 4) the technology required is economic, and 5) they are extremely well tolerated by children. In order to be useful for wide clinical research in developmental age, any technique has to fulfil these criteria, and SEPs do so.

Preliminary applications of SEPs recording in different neurodevelopmental disorders will be presented (mental retardation, autism, ADHD). The potential of SEPs recordings for addressing the underlying pathophysiology of these disorders on the one hand, and for targeting pharmacological treatments and for monitoring the efficacy for rehabilitation interventions, on the other one, will be discussed.

Article Information

Conference Proceedings: World Congress on Nursing & Healthcare (Paris)

Conference date: 18-19 November, 2019

Inovineconferences.com

***Corresponding author:** Sergio Zanini, Scientific Institute Eugenio Medea, Italy; Email: [sergio.zanini\(at\)lanostrafamiglia.it](mailto:sergio.zanini(at)lanostrafamiglia.it)

Citation: Zanini S (2019) The potential of SEPs recordings to address Neurodevelopmental disorders in children. J Pediat Infants.

Copyright: © 2019 Zanini S. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.