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Abstract

Neuromodulation refers to the regulation of neural activity by modifying the activity of specific nerve fibres or groups of neurons. It is achieved through the use of various techniques, including electrical stimulation, magnetic stimulation, chemical agents, and surgical procedures. These techniques are applied to specific regions of the nervous system to modify the transmission of electrical impulses, which in turn can alter brain activity and behaviour (Rossi et al., 2020). Neuromodulation is used in the treatment of a wide range of neurological and psychiatric conditions, such as Parkinson's disease, depression (Cho H., et al 2022), and fatigue (Tecchio et al.2014) among others. It is also an active area of research, with ongoing efforts aimed at improving existing techniques and developing new ones to better understand and regulate brain function (Ferreri et al., 2013, Hallett M. et al, 2017). Neuromodulation techniques have been studied as a potential approach for rehabilitation in MS patients. While more research is needed to fully understand the potential of neuromodulation techniques in the rehabilitation of MS patients, current results suggest that they may offer new and effective approaches to address the physical and cognitive symptoms associated with the disease (Padalino M. et al 2021). In this seminar we will discuss the principles of these techniques and their applications in the rehabilitation of motor and cognitive symptoms of multiple sclerosis (Tecchio F. et al, 2022).

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Neuromodulation: between past, present & future

Dr.ssa Teresa L'Abbate
Uninettuno

Seminario

Venerdì, 14 aprile 2023, ore 14:30 Online: http://bit.ly/3UworGj