



World Congress on

# Neurorehabilitation

## Clinical Case at Home: Occupational Therapy in Neurehabilitation based on video games at home

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Acquired Brain Injury is disability caused by a sudden injury to the brain. It is characterized by its sudden onset and by the varied set of sequelae depending on the area of the brain injured and the severity of the damage. These sequelae cause abnormalities in perception, physical, cognitive and functional alterations. The use of technologies for neurological rehabilitation could be beneficial for the treatment of this pathology. Alexander at age 16 suffers a fall causing brain damage acquired by a head injury. He is currently 18 years old and during these last two years he has been in different rehabilitation treatments that have improved his physical, cognitive and functional condition. Due to confinement due to Covid-19, Alex begins to receive Occupational Therapy at his home. Regarding the limitations that it presented, the impairment of motor coordination, spastic right arm without functionality, impairment in Perceptual-Cognitive aspects such as memory, attention and impairment in executive abilities stood out. Our goal is to develop an intervention plan in order to regain motor control, manual dexterity and train social and communication skills through video games on your home computer. The plan is based on the theoretical framework of learning and motor control and the Canadian model of occupational performance. We show the remarkable functional improvement experienced by Alex after eight weeks of home treatment. The rehabilitative approach complemented with video games seems to be useful to improve motor coordination, functional independence and motivation during the intervention, so it could constitute a therapeutic tool in neurological rehabilitation