

Comparing the effect of Botulinum toxin and stretching in treating spasticity on children with cerebral palsy

Fuad Al-Dabbak
Loma Linda University, USA

Cerebral palsy (CP) is a non-progressive clinical disease that happens due to damage in the motor cortex of the brain in fetal or infant stage of life that damage may lead to a variety of physical impairments including motor deficits. Motor deficits include the presence of spasticity due to uncontrolled firing of Alpha- motor neuron. Spasticity has been rated as the main contributor to reduce in longitudinal muscle growth and functional ability in children with spastic CP. Spasticity can be managed using certain oral medication, intrathecal baclofen, selective dorsal rhizotomy, and phenol drugs. During the last few years, Botulinum toxin serotype A (BTX-A) has been presented as another option to normalize muscle tone in children with CP. However, the side effects of Botulinum toxin may include muscle weakness, pain, oropharyngeal, bowel/bladder, blood circulation, and respiratory problems. Therefore, the purpose of this study is to examine the effect of botulinum toxin compared to stretching exercises on spasticity in children with cerebral palsy. Forty subjects, 20 male and 20 female, will be recruited for this study from Loma Linda Medical Center, California, USA. Subjects will be included if they are between 3-12 years old and were diagnosed with moderate to severe spastic cerebral palsy. Level of spasticity will be measured using Modified Ashworth Scale. Also, Functional motor outcome will be measured using the Functional Independence Measure (FIM). We expect the effect of stretching on reducing Spasticity will be significantly more than the effect of botulinum toxin.

Biography

Fuad M. Al-Dabbak, PT, MPT, earned my Bachelor's degree in Physical Therapy from Hashemite University in 2008. I obtained my master's degree from Loma Linda University in 2013. After graduation from physical therapy school, I practiced as physical therapist in a variety of settings including hospitals, outpatient clinics, and skilled nursing facilities. In addition, I have continued to enrich my clinical skills and knowledge by attending courses with specific focus on neuro rehab. I have two published articles, and one got an acceptance to be published. Outside of work, I spend much of my time with my wife Eman, and my daughters Reem and Aseel. I have a great love for biking. I also like to travel.

FMAldabbak@llu.edu

Notes: