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Physiotherapy and Rehabilitation in Spinal Muscular Atrophy (SMA)

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Abstract
Spinal muscular atrophy (SMA) is a common genetic neuromuscular disease that causes progressive muscle weakness, atrophy and hypotonia. In people with SMA, the spinal cord alpha motor neurons are affected due to missing or altered Survival Motor Neuron-1 (SMN1) gene. When the SMN1 gene is missing or damaged, a protein that allows nerves to control muscles cannot be provided. With the reduction of the SMN1 protein, a process that causes the death of motor nerve cells in the spinal cord can be experienced.
The course of SMA is different in each individual and symptoms range from mild to severe. The onset of SMA can occur from birth to adulthood. Muscle weakness is an important feature of SMA. Consequently; Other findings are atrophy, hypotonia, absence / marked decrease in deep tendon reflexes, hand tremors, joint limitations, spinal deformities and lung-respiratory problems. Patients with SMA have progressive muscle weakness that may lead to difficulty walking, sitting up, swallowing, and breathing, among other symptoms.
In order to provide the functions of children with SMA as much as possible, physiotherapy and rehabilitation programs help to develop muscle strength and movement abilities. Physiotherapy and rehabilitation programs are important to ensure that children with SMA achieve the best possible level of independence and mobility in daily life, as well as to prevent / delay the development of complications. When a child is diagnosed with SMA, a physiotherapy should be initiated to reduce and prevent additional complications such as loss of range of motion, abnormal movements, gait problems, breathing problems and abnormal postures, scoliosis.
Keywords:*Physiotherapy, Rehabilitation, Spinal Muscular Atrophy.*