

Abstract

Difficulties in identifying convulsions have hampered the determination of the effect of ECT on spasticity. Fang et al (1995) have used Price and Pandian, 2002). Use a single case study design to investigate the impact of ES On a patient with problems with upper limb function due to spasticity secondary to cerebral palsy. Using a hand function test to evaluate the level of spasticity, led ES To a measurable reduction in spasticity. However, a systematic review of the literature on the use of ES For the prevention and treatment of shoulder pain after stroke there is no significant effect on upper extremity spasticity Considerations when using ES .It is important to be aware of the safety aspects related to the use of electrical stimulation and the harmful effects it may have on abnormal neuromuscular systems, as much research has been conducted to date on normal muscles. Researchers have looked at the problems of fatigue when stimulating muscles and the physiological effects of electrical stimulation and the potential risks when using electrical stimulation indiscriminately for therapeutic stimulation. In fact, initial studies that used stimulation to allow people with hemiplegia and quadriplegia to stand and walk short distances found that fatigue limited distance traveled and imposed excessive stress on the cardiorespiratory system and legs (see Stokes and Cooper (1989) Petrofsky , 1988). These problems were partly overcome by the combined use of supports and FES , and prepare the muscle for FES Through low-frequency adaptive stimulation to improve endurance. Increased resistance to fatigue in response to conditioning stimulation is achieved through biochemical and physiological adaptations in the muscle The frequency patterns used during conditioning stimulation are important, as a single low frequency can cause muscle weakness but intermittent bursts of high frequency can maintain strength and improve endurance. When it is used ES To strengthen muscles, a stimulation pattern similar to the normal motor unit firing pattern has been shown to be more effective than regular frequency or random frequencies. This discovery was made in patients with rheumatoid arthritis and hand muscle weakness.