THE EFFECTS OF THE ELECTRIC STIMULATION WITH MIDDLE FREQUENCY ON CENTRAL AND PERIPHERAL PALSY

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The cause of motor lesion in central palsy mostly concerns the peripheral motoneurons and muscle fibers innervated by them. The affected motor units are only deprived of informations from the motor brain centers responsible for significant movement control. The muscles are “flabbily” paralyzed immediately ,the muscle tone is fastly reduced. After some time, the initially flabby palsy becomes increasingly spastic, with a progressive rising of reflex tone. The treatment goals of this kind of electrotherapy on these patients are to prevent the spastic mode, with acceleration of the axonal transport ,increased enzymic synthesis and challenge of metabolism(training effect),acceleration of the sprouting of regenerating axons, the maintenance of the range of motion of the joints involved.

This, in order to accellerate physiotherapeutic exercises. The effects of action impulses produced by middle frequency electrical stimulation in neural functional disorders, partially or totally denervated muscles due to peripheral palsy are:

Activation of the muscle pump to accelerate the centripetal transport of blood and lymph Activation of blood flow in the active muscle

Adaptation of the muscle fibers and their innervating motoneurons to the metabolic needs, i.e. increased repolarization activity and,in the muscle fibers additional contraction activity.

Thanks to this electrical stimulation therapy,what was once considered as a theoretical conclusion has now turned into reality.Of about 100 patiets examined, 30 (left side involved) were specifically treated with 2 electrical middle frequency circuits.The treatment started 10 days after the stroke.All the patients began the rehabilitation without articoular rigidity or spasticity evolution in the muscolar districts.Moreover, they experienced a relaxing feeling in their muscular groups and showed benefits since the very first applications.These considerations and these relevant results are the object of this study.

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