F-waves in Spastic Cerebral Palsy

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Abstract: F-waves of the tibial nerve were studied in 10 children with spastic cerebral palsy and in 20 healthy control children. In comparison to healthy children, the F-wave amplitudes and F/M ratios significantly increased in all patients. The waveforms of F-waves usually demonstrated not only a high amplitude but they were also uniform. In addition, F-chronodispersion also decreased in all patients. Alterations in the F-waves parameters in children with spastic cerebral palsy were similar to those in adult patients with spasticity. Based on the above findings, the F-wave parameters may thus be possibly useful for the assessment of motor neuron excitability in children.

Key words: Spastic cerebral palsy, Children, F-wave F-chronodispersion