Poland syndrome. Use of kinesiotaping in improving back pain and numbness of the upper limb

N. Roussos, D. Kalantzopoulos, V. Aggeli, I. SIoutis, A. Farmakides, N. Lykos, D. Patatoukas

Introduction. Poland syndrome is a congenital anomaly, noted for the underdevelopment or absence of the chest (pectoralis,) muscles on one side of the body as well as webbing of the fingers (cutaneous syndactyly) on the hand of ipsilateral side of the body. The severity of Poland syndrome is variable, and it is not possible for mild cases to be evident until puberty. It is felt, therefore, that cases may be misdiagnosed. Materials and methods. A male patient, 48, referred for EMG study, suffering from persisting back pain and numbness of the Lt upper limb. The EMG study didn’t reveal any findings compatible with neurogenic lesion in roots of the cervical spinal. Clinical examination showed elevation of the Lt scapula, consisted spasm of the Lt trapezius, absence of the major part of the Lt pectoralis and ipsilateral cutaneous syndactyly. The whole appearance was compatible with Poland syndrome. Our intervention focused on providing the patient with a painless period during which he would strengthen his muscles and correct his muscle imbalance. Physical means alone had no effect. Acupuncture was not tolerated by the patient. A kinesiotapping program was applied aiming at correcting his posture and providing cutaneous stimulation to enforce the action of the remaining muscle groups. Kinesiotaping technique is based on cutaneous stimulation over the hyper-acting muscle groups. Taping gives proprioceptive stimulation that motivates the nervous system causing auto-correction of posture and reducing pain. Results. The patient’s symptoms were improved after a few sessions and he was able to start a program of muscle strengthening. Improvement of quality of sleep was the first sing followed by elongation of the painless periods and reduction of numbness. Conclusion. Providing a patient suffering from Poland syndrome, with a painless frame period, encourages systematic muscle strengthening leading to pain relief.

How does cognitive fatigue modify cognitive performance in multiple sclerosis (MS) patients?

A. Morgantini, L. Catena, L. Pierfederici, L. Bacci

Istituto Di Riabilitazione Santo Stefano – Centro Villa Adria – Ancona

Introduction. Cognitive fatigue can be measured as an inability to maintain initial levels of attentional performance. (1) Researchers didn’t agree whether a longer and continuous effortful cognitive task increases mental fatigue and changes neuropsychological performance (2,3). The objectives of this study were to examine the cognitive performances and ratings of subjective cognitive fatigue using cognitive fatigue tasks lasting different times and to evaluate the correlation between subject cognitive fatigue and the objective performances. Materials and methods. Of 110 individuals with MS, only 45 patients presented significant fatigue (measured with visual analog Test for Attentional Performance) and initial cognitive deficit (Symbol Digit Modalities Test) and were randomized in three groups, matched for different initial levels of cognitive deficit. Each group completed a neuropsychological training in a single session lasting different times (15, 30, 45 minutes). Subjective measure of fatigue (Cognitive Modified Fatigue Impact Scale (MFIS) subscale) and attentional test (Paced Auditory Serial Addition Task (PASAT)) were rated before and after the session. Results. There were no significant differences between the three groups in the PASAT. Although the 45-minute subscale didn’t significantly differ for the three groups, the value is close to significance. There was no significant correlation between change in subjective fatigue and cognitive performance. Conclusion. Changes in performance over time showed improvement rather than deterioration. These results confirm that patients’ subjective ratings of their fatigue are not valid indicators of their actual performance on cognitive tests and that the cognitive fatigue doesn’t decline more rapidly over the time engaged in mental activity.

References