MANUAL THERAPY AND INTERACTIVE ELECTRO NEUROMODULATION IN THE TREATMENT OF SPASTICITY: EVALUATION OF IMMEDIATE EFFECTS

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This study, underwent in the Chair of Physical Medicine and Rehabilitation of “G. d'Annunzio” University of Chieti-Pescara, have the purpose to evaluate the immediate effects on spasticity of lower limbs of two different therapeutic approaches on a single session in patients affected by cerebral palsy. 30 patients has been recruited and divided in 3 groups: Group A has been treated with neuromuscular manual therapy in aquatic environment.

Group B has been treated with interactive electro neuromodulation. Group C has underwent sham approach respecting the operative procedure of Group B treatment. The whole sample has been recruited following these inclusion criteria:

Diagnosis of cerebral palsy

Age between and 10-20 years

Presence of spastic para/tetra paresis

Ashworth Scale result between 1 and 3

The whole sample has been evaluated using a myometric system, MyotonPro, before (T0) and after (T1) the single session of treatment, in the same environmental conditions. The statistical analysis underline that both Interactive Electro Neuromodulation and Manual Therapy in Water Environment results effective in reduction of muscular tone, while in Group C no significant results has been shown. In conclusion, we can affirm that Interactive Electro Neuromodulation approach could be a good alternative for the treatment of spasticity in patients affected by cerebral palsy, regarding costs and benefits.

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