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Benefits of outdoor interdisciplinary neurosensory approach in patients with disorders of consciousness: Preliminary results

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Introduction: The use of natural environments to promote health and prevent illness is widely recognized. However, in the case of individuals experiencing disorders of consciousness (DOC), little is understood about the use of contact with nature in treatment and rehabilitation. The aim of this study is to investigate the effects of outdoor therapy in relation to the awareness and wakefulness levels of this population.

Patients & Methods: This study is a non-randomized cross-over pilot trial. It is set within the Acute Neuro-Rehabilitation Unit (University Hospital, Lausanne). Twenty adults diagnosed with DOC were included in the study. They participated in an indoor-outdoor neurosensory interdisciplinary therapy program. As the primary outcome awareness and wakefulness were measured by an adapted behavioral grid. Functioning and disability were recorded as secondary outcomes.

Results: The difference in scores between indoor and outdoor therapy was computed. Preliminary results show a solid positive trend in favor of the outdoor therapy. We can clearly detect the improvement of several points such as, visual fixation, exploration, intentional movements and communication. It is noteworthy that these clinical items are involved in in the determination of DOC diagnosis.

Conclusion: Outdoor therapy may provide a beneficial complementary treatment option for DOC. The promising preliminary results of the study show the need to develop further interdisciplinary research in this field.

Biography

Caroline Attwell graduated with a Master's in Physiotherapy in 2004 from de University of Buenos Aires, Argentina. She started her career in a high-performance athletic training facility then left for the United States and Europe where she worked and did research for a polo organization. Since 2008, she has been in the acute neurorehabilitation team at the CHUV (University Hospital of Lausanne) as Physiotherapist and Researcher. She occasionally lectures for the HESAV (University of Applied Sciences and Arts, Western Switzerland). Her domains of preference are the new developments in neurorehabilitation, acute neurorehabilitation, new technologies and respiratory care for acute neurological patients.

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