

Sleep in children with acquired brain injury – a new approach to investigate neuronal recovery



Background: After acquired brain injury, children show some spontaneous recovery that can be further enhanced by rehabilitation training. However, neuronal mechanisms underlying this recovery process remain poorly understood. In our study we use high-density electroencephalography (hdEEG, 128 electrodes) to record sleep at two to three time points in the course of rehabilitation therapy. We investigate whether changes in the sleep-EEG are related to improved functions (e.g, motor functions) and therefore might reflect neuroplastic brain reorganization processes.

Goal

- Investigate the value of Sleep-EEG recordings as markers for brain reorganization.
- Improve our understanding of neuronal recovery in children with acquired brain injury.

Project onset

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Project members

- Anne-Laure Mouthon, PhD Student
- Reto Huber, Research group leader, Child Development Center and Pediatric Sleep Disorders Center, University Children's Hospital Zurich
- Hubertus van Hedel, Research group leader, Pediatric Rehabilitation Research Group, Rehabilitation Center University Children's Hospital Zurich; Andreas Meyer-Heim, Clinical director, Rehabilitation Center University Children's Hospital Zurich

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