

Somatosensory mapping and body representation in dystonia

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Dystonia is a movement disorder characterized by abnormal movements and/or postures due to involuntary muscle contractions. Dystonia affects people at different ages and on different body parts, and may run in families. It causes physical disability and emotional distress and can, thus, seriously impact quality of life. Although dystonic symptoms affect the ability to move, there is evidence that abnormalities within the sensory systems of the brain might drive the abnormal motor output. However, this has not been studied systematically. This project aims to study somatosensation in dystonic patients and healthy controls across different body parts and build body maps of somatosensory function. This will provide comprehensive knowledge on the somatosensory functions that are altered in dystonia. This research will help explain why dystonia affects particular body parts and why it spreads from one body part to another in some patients. Further, the project will test the effects of established treatments, such as local botulinum toxin A injections and deep brain stimulation on somatosensory body maps in order to examine the interactions between motor symptom improvement and somatosensation. This project will provide important insight into the causes of dystonia and potential novel approaches to help people suffering from it.

Projektbeteiligte

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Remission in Dystonia: Systematic Review of the Literature and Meta-analysis.
Intact Organization of Tactile Space Perception in Isolated Focal Dystonia
