

Fibromyalgia and the role of brain connectivity in pain inhibition

October 1 2014



Credit: Mary Ann Liebert, Inc., publishers

The cause of fibromyalgia, a chronic pain syndrome is not known. However, the results of a new study that compares brain activity in individuals with and without fibromyalgia indicate that decreased connectivity between pain-related and sensorimotor brain areas could

contribute to deficient pain regulation in fibromyalgia, according to an article published in *Brain Connectivity*.

The new study by Pär Flodin and coauthors from Karolinska Institutet (Stockholm, Sweden) builds on previous findings in [fibromyalgia](#) that showed abnormal neuronal activity in the brain associated with poor pain inhibition. In the current study, ["Fibromyalgia is Associated with Decreased Connectivity between Pain- and Sensorimotor Brain Areas"](#), the researchers report a pattern of "functional decoupling" between pain-related areas of the brain that process [pain signals](#) and other areas of the brain, such as those that control sensorimotor activity in fibromyalgia patients compared to healthy patients, in the absence of any external pain stimulus. As a result, normal [pain perception](#) may be impaired.

"Fibromyalgia is an understudied condition with an unknown cause that can only be diagnosed by its symptoms," says Christopher Pawela, PhD, Co-Editor-in-Chief of *Brain Connectivity* and Assistant Professor, Medical College of Wisconsin. "This study by Flodin et al is an important first step in the understanding of how the brain is involved in the widespread pain perception that is characteristic of the disorder."

More information: The article is available free on the *Brain Connectivity* website at <http://online.liebertpub.com/doi/full/10.1089/brain.2014.0274> until November 1, 2014.

Provided by Mary Ann Liebert, Inc

Citation: Fibromyalgia and the role of brain connectivity in pain inhibition (2014, October 1) retrieved 20 March 2024 from <https://medicalxpress.com/news/2014-10-fibromyalgia-role-brain-pain-inhibition.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.