



River Publishers Series in open

## Generalized Hyperalgesia in Chronic Low-Back Pain

**Author:** Søren O'Neill, Center for Sensory-Motor Interaction (SMI), Department of Health Science and Technology, Aalborg University, Aalborg, Denmark

**e-ISBN:** 9788792329674

**Available From:** September 2013

**Price:** € 0.00

### Description:

Generalized hyperalgesia has been demonstrated in cross-sectional studies in a range of chronic pain disorders, including low-back pain. It is not clear, whether the increased sensitivity to experimental pain stimuli in chronic low-back pain sufferers develops early with acute pain, later with chronification, or whether it actually represents pre-existing, high pain sensitivity in a susceptible subgroup of the background population. Assessing experimental pain sensitivity is not routine practice in the management of low-back pain.

The current thesis consists of five studies, which were conducted in order to clarify the temporal association of generalized hyperalgesia and low-back pain. In three studies, the experimental pain sensitivity in acute low-back pain patients was compared to that of pain-free controls. Similarly, in three studies, the pain sensitivity of chronic low-back pain patients was compared to controls and in a single study, the relative risk of developing future low-back pain when displaying a high pain sensitivity (low pressure pain threshold) was investigated. Furthermore, two novel methods of experimental pain stimulation were assessed.

The results support an association between generalized hyperalgesia and chronic, but not acute low-back pain. A high baseline pain sensitivity in pain-free participants did not constitute a risk factor for the future development of low-back pain.

Generalized hyperalgesia, appears to develop over time in step with the progression from acute/subacute low-back pain to chronic low-back pain. This may have clinical implications for the future assessment and management of low-back pain.

**Keywords:** Generalized hyperalgesia has been demonstrated in cross-sectional studies in a range of chronic pain disorders, including low-back pain. It is not clear, whether the increased sensitivity to experimental pain stimuli in chronic low-back pain sufferers develops early with acute pain, later with chronification, or whether it actually represents pre-existing, high pain sensitivity in a susceptible subgroup of the background population. Assessing experimental pain sensitivity is not routine practice in the management of low-back pain.

#### Denmark Head Office

Alsbergvej 10  
9260 Gistrup  
Denmark  
[www.riverpublishers.com](http://www.riverpublishers.com)  
Email: [info@riverpublishers.com](mailto:info@riverpublishers.com)

#### USA Office

Indianapolis, IN  
USA  
Tel.: +1-3176899634  
Email: [rajeev.prasad@riverpublishers.com](mailto:rajeev.prasad@riverpublishers.com)

#### UK Office

River Publishers  
Email: [philippa.jefferies@riverpublishers.com](mailto:philippa.jefferies@riverpublishers.com)