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Authors: M. Roosink, MSc¹
G.J. Renzenbrink, MD²
J.R. Buitenweg, PhD¹
R.T.M. Van Dongen, MD, PhD³
A.C.H. Geurts, MD, PhD⁴
M.J. IJzerman, PT, PhD⁵

Affiliations: ¹ Biomedical Signals & Systems, MIRA institute for Biomedical
Technology & Technical Medicine, University of Twente, the Netherlands
² Roessingh Rehabilitation Center, Roessingh Research & Development,
the Netherlands
³ Department of Anesthesiology, Pain Centre, Radboud University
Nijmegen Medical Centre, the Netherlands
⁴ Radboud University Nijmegen Medical Centre, Nijmegen Centre for
Evidence Based Practice, Department of Rehabilitation, and St
Maartenskliniek, the Netherlands
⁵ Health Technology & Services Research, MIRA institute for Biomedical
Technology & Technical Medicine, University of Twente, the
Netherlands.

Abstract Title

**SOMATOSENSORY ABNORMALITIES AT BASELINE AND FOLLOW-UP IN PATIENTS
DEVELOPING POST-STROKE SHOULDER PAIN**

Post-stroke shoulder pain (PSSP) is traditionally regarded as a peripheral nociceptive pain. However, treatment aimed at peripheral pain mechanisms is often unsatisfactory and pain is persistent in a significant amount of patients. In addition, several signs of central sensitization (allodynia, generalized hyperalgesia) have been observed in patients with chronic PSSP, suggesting that central pain processing may be altered in these patients. To better understand the role of peripheral and central mechanisms in the development of PSSP we investigated pain complaints and somatosensory functions at baseline and two consecutive follow-up time frames. We used the neuropathic pain diagnostic questionnaire (DN4) and executed a clinical examination and electrical and mechanical quantitative sensory testing combined with a cold pressor test. Patients were assessed at 3 time points: Baseline (0-2 weeks post-stroke), FU1 (3 months post-stroke) and FU2 (6 months post-stroke). A total of 40 patients were included in the study. All patients suffered a unilateral supratentorial brain lesion resulting in somatosensory and/or motor dysfunctions at the affected upper extremity. Preliminary analysis showed that 10 patients (25%) had PSSP at Baseline. In these patients, pain complaints were mostly involving pain attacks induced by movement, although also intermittent and constant pain were reported. In addition, 4 patients scored at least 4 on the DN4, indicating that pain complaints may be neuropathic. In patients with PSSP, the incidence of diminished cold sensation and diminished proprioception at the affected side was higher, whereas abnormal touch and sharpness sensation were equally common in patients with and without PSSP. Allodynia was observed in only a few cases, however, 23% of patients reported spontaneous or evoked dysesthesias, regardless of the presence of PSSP. Currently, follow up measurements are being finished. Conclusions will be drawn when measurements have been performed at all time points.

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Selection of Topics:

Disease entities: Central Pain, Joint and Muscle Pain, Other: Post-stroke shoulder pain

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Stroke, pain, shoulder, quantitative sensory testing