Somatosensory Rehabilitation of Neuropathic Pain: from Theory to Clinical application

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Neuropathic pain syndromes have a severe impact on patients' quality of life and is hard to treat using only a classical pharmacological approach (Baron et al., 2010). Therefore, a **multidisciplinary approach** is recommended in order to get better results, including rehabilitation. Somatosensory rehabilitation of pain is a method that seems promising in terms of pain reduction. On the other hand, patients and health professionals have to discuss about the expected results and be realistic about the therapeutic goal, in order to maintain adhesion to the treatment.

Just as any other specific method in rehabilitation, somatosensory rehabilitation of pain requires to be discuss in terms of **efficacy in decreasing pain** and the expected duration of treatment. A series of clinical observations on 81 chronic neuropathic pain patients with upper extremity pain, treated with somatosensory rehabilitation of pain method shows interesting results. Patients with neuropathic pain localised in the upper extremity have been treated with the somatosensory rehabilitation of pain method for a mean of 56 +/- 22.6 months (range 7-523 months). At the first session, pain was evaluated with the McGill Pain Questionnaire (Melzack, 1975), in order to monitor the expected modulation of pain. Results were a mean of 43.8 +/- 26.9 points (range 11 – 88 points). The questionnaire was done again at the last session. The results of these observations shown a final result at the McGill Pain Questionnaire of 8.4 +/- 6.4 points (0 – 27 points) for a duration of treatment of 94.5 +/- 65.6 months (range 9 – 405 days).

As a result, clinical observations on neuropathic pain patients have shown that there is always and underlying hypoaesthesia when mechanical allodynia disappears (Spicher et al., 2007). Therefore, static mechanical allodynia is considered as a paradoxical painful hypoaesthesia.

Considering that somatosensory rehabilitation of pain can have interesting results with patients suffering with neuropathic pain, it is essential to know the realism of clinical application in daily practice for health professionals. A few things need to be take in consideration, before planning to integrate somatosensory rehabilitation of pain as a regular method used in health care facilities. First, learning somatosensory testing and rehabilitation takes time and energy to the willing professional. The somatosensory rehabilitation of pain network, responsible to promote the method, recommends 56 hours of courses and personal work to learn the method for professionals. Second, a specific space where sessions of treatment can occur with patients need to be available. Assessments requires a calm environment, in order for the patient to provide the needed

concentration from the various tests. Also, the complete assessment describe in the somatosensory rehabilitation of pain method takes a lot of time, considering the amount of evaluations recommends. Third, the patient adhesion to treatment is crucial with the somatosensory rehabilitation of pain method. In order to obtain positive results in rehabilitation, the patient will be asked to do daily exercises at home, sometimes up to eight times a day. It is a method that requires a full engagement from the patient in order to complete the rehabilitation.

Somatosensory Rehabilitation of pain is a method that implies a lot of engagement from both the patients and the team of health professionals working with them. It is also important to consider the therapeutic adhesion to such a treatment, in terms of energy and on a period of time that can vary a lot depending of the initial severity of cutaneous disorders.