Omo Neurexa

Clinical effects

Major Findings

With Omo Neurexa compared to no orthotic treatment:

Patient-reported

→ **Patients reported a positive effect of Omo Neurexa in terms of pain reduction (45%), activity level (55%) and performance of mobility related ADL's (58%)** (Hesse et al. 2013)

→ **50% of patients reported a reduction of shoulder pain and another 50% reported on no change in the pain situation** (Hesse et al. 2009)

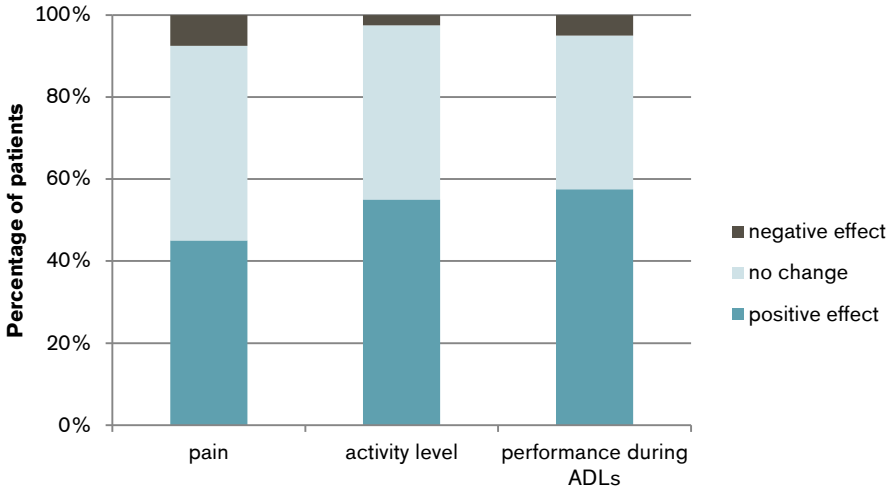
→ **58% of patients reported shoulder pain at the beginning of the intervention phase: 86% of those patients reported a relevant reduction of shoulder pain due to wearing the orthosis** (Hesse et al. 2008)

→ **Protection of the paretic arm leads to a better concentration on gait rehabilitation** (Hesse et al. 2008)

Therapist-reported

→ **Therapists reported a positive effect of Omo Neurexa in terms of activity level (70%) and performance of mobility-related ADL's (55%)** (Hesse et al. 2013)

Omo Neurexa improved the ability of the patients to participate in daily activities



(Hesse et al. 2013)

Clinical Relevance

The annual incidence of stroke in the industrialized world is approximately 180 per 100,000 inhabitants, and it is the most common cause of permanent disability (Hesse et al. 1995, Kolominsky-Rabas et al. 2006). A significant proportion of stroke survivors will experience neurologic squeal and complications. Pain is a common complication after a stroke. The most frequent pain condition is the hemiplegic shoulder pain. (Kong et al. 2004)

The painful shoulder syndrome (PSS) occurs in 15–84 % of subacute stroke survivors, and it is associated with an extended length of stay and a poorer rehabilitation outcome (Andersen et al. 1995, Barlak et al. 2009, Bowsher 1995, Leijon et al. 1998, Ratnasabapathy et al. 2003, Van Ouwenaller et al. 1986, Zorowitz et al. 1996). It leads to a limitation in performing ADLs, participation and rehabilitation activities. All this leads to a poor functionality. (Lindgren 2013, Murie-Fernández et al. 2012)

Activity and mobility are assessed to get an insight into general independence of the patient. An increased grade of mobility is crucial to reach a satisfying quality of life. Activities of daily living (ADLs) include self-care activities as functional mobility, dressing, eating and personal hygiene as well as activities to live independently in a community.

Summary

Three studies evaluated the effectiveness of the Omo Neurexa:

A reduction in shoulder pain due to wearing the Omo Neurexa was reported by 45%-86% of patients in all three studies that evaluated the Omo Neurexa (Hesse et al. 2008, Hesse et al. 2009, Hesse et al. 2013).

Another aspect observed when wearing the Omo Neurexa was an improvement in activity level and performance during mobility related activities of daily living (Hesse et al. 2013).

This might be due to the finding that the subluxation gap could be reduced or even closed with Omo Neurexa in the majority of patients in all three studies (Hesse et al. 2008, Hesse et al. 2009, Hesse et al. 2013).

References of summarized studies

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