Omo Neurexa

Satisfaction

Major Findings

With Omo Neurexa compared to no orthotic treatment:

Wearing comfort: Patient-reported

→ **Patients perceived the material of the orthosis as comfortable on the skin** Furthermore, no pressure sores, chafe marks or other adverse reactions (especially no relevant increase in spasticity at the upper extremity, no stiffening of the shoulder, no excessive swelling of the hand, no skin irritations or redness) were seen (Hesse et al. 2008)

→ **76.9% of patients reported good wearing comfort** (Hesse et al. 2009)

→ **80% of patients had a score ≥ 7 on VAS (visual analog scale; 0= very bad, … 10= excellent), indicating good wearing comfort** (Hesse et al. 2013)

Wearing Comfort: Therapist-reported

→ **73% of the therapists rated wearing comfort with a VAS score ≥ 7, indicating good wearing comfort** (Hesse et al. 2013)

Odour nuisance: Patient-reported

→ **Minimal odour nuisance due to transpiration** (Hesse et al. 2008)

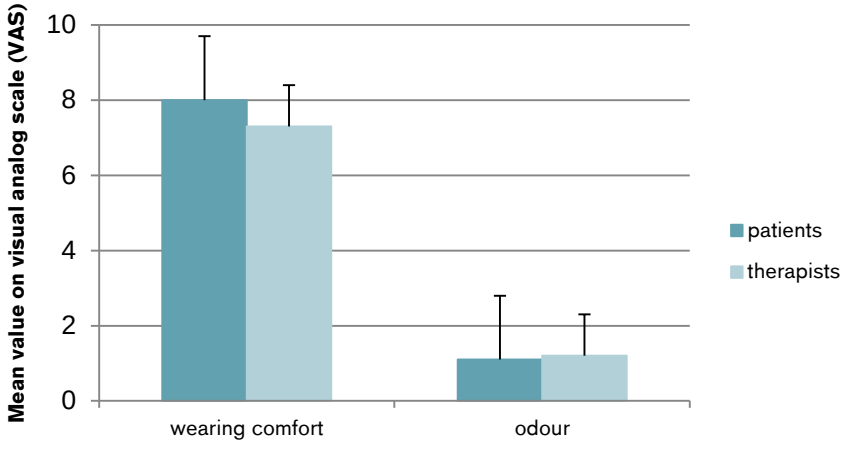
→ **76.9% of patients had only minimal odour build-up** (Hesse et al. 2009)

→ **85% of patients had a score ≤ 3 on VAS (0= absent, … 10= intolerable), indicating tolerable odour nuisance** (Hesse et al. 2013)

Odour nuisance: Therapist-reported

→ **83% of the therapists rated odour with a VAS score ≤ 3, indicating tolerable odour nuisance** (Hesse et al. 2013)

Omo Neurexa showed good wearing comfort and minimal odour nuisance



(Hesse et al. 2013)

Clinical Relevance

Satisfaction can be measured to determine the general well-being of a person and the fulfilment of his expectations to the medical device. It is a very meaningful parameter to investigate since it has a direct impact on the patients well-being and compliance. It is influenced by other categories and can therefore be seen as a summary of possible pain reduction and better performance of ADLs.

Satisfaction is also correlated with the usage of the medical device. Studies on the non-use of devices suggest that, on average, a third of all devices provided are not used (Scherer 2002). Reasons for non-use involve lack of consumer involvement, inadequate performance of the product, failure of the product to improve function, and difficulty in operating the product (Batavia & Hammer 1990, Wielandt & Strong 2000). Obtaining user perspectives and satisfaction is therefore fundamental.

Summary

The satisfaction with the Omo Neurexa was assessed in all three studies:

At the end of the intervention, the patients (Hesse et al. 2008, Hesse et al. 2009, Hesse et al. 2013) and the attending physiotherapists (Hesse et al. 2013) rated the wearing comfort and the odour nuisance using a visual analog scale (0-10). The physiotherapists based their assessment on the observation of patients during treatment.

The majority of patients tolerated the orthosis well. In all referenced studies, patients reported a good wearing comfort of the orthoses and only minimal odour nuisance (Hesse et al. 2008, Hesse et al. 2009, Hesse et al. 2013). The physiotherapists reported that the orthosis helped improve walking performance and other mobility-related tasks (Hesse et al. 2013). Furthermore 45-86% of patients reported a reduction of shoulder pain due to wearing the Omo Neurexa (Hesse et al. 2008, Hesse et al. 2009, Hesse et al. 2013).

“The well-tolerated shoulder orthosis … offered a good fit, and ease of performing activities” (Hesse et al. 2013)

References of summarized studies

Hesse, S., Bardeleben, A., Grunden, J., Rembitzki, I., Werner, C. (2008). Vorstellung einer neuen Schulterorthese zur Behandlung der schmerzhaften Schulter von hochparetischen Patienten in der Frührehabilitation. *Neurologie & Rehabilitation*, 14 (2): 91–94.

Hesse, S., Bardeleben, A., Rembitzki, I., Werner, C. (2009). Klinische und ganganalytische Befunde zur Schulterorthese Omo Neurexa. Clinical and Gait Analysis Data on Shoulder Orthosis Omo Neurexa. *Orthopädie-Technik*, 3: 177–181.

Hesse, S., Herrmann, C., Bardeleben, A., Holzgraefe, M., Werner, C., Wingendorf, I., Kirker, S. (2013). A new orthosis for subluxed, flaccid shoulder after stroke facilitates gait symmetry: A preliminary study. *Journal of Rehabilitation Medicine*, 45 (7): 623–629. DOI: 10.2340/16501977-1172

Other References

Batavia, A. I., & Hammer, G. S. (1990). Toward the development of consumer-based criteria for the evaluation of assistive devices. *Journal of rehabilitation research and development*, *27*(4), 425-436.

Scherer, M. J. (2002). The change in emphasis from people to person: introduction to the special issue on Assistive Technology. *Disability and rehabilitation*, *24*(1-3), 1-4.

Wielandt, T., & Strong, J. (2000). Compliance with prescribed adaptive equipment: a literature review. *The British Journal of Occupational Therapy*, *63*(2), 65-75.