

## Reference

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# Vorstellung einer neuen Schulterorthese zur Behandlung der schmerzhaften Schulter von hochparetischen Patienten in der Frührehabilitation

(Presentation of a new shoulder orthosis for the treatment of a painful shoulder in highly paretic patients in the early phases of rehabilitation)

Neurologie & Rehabilitation 2008; 14 (2): 89-92.

## Products

### Omo Neurexa

## Major Findings

With Omo Neurexa compared to no orthotic treatment:

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**

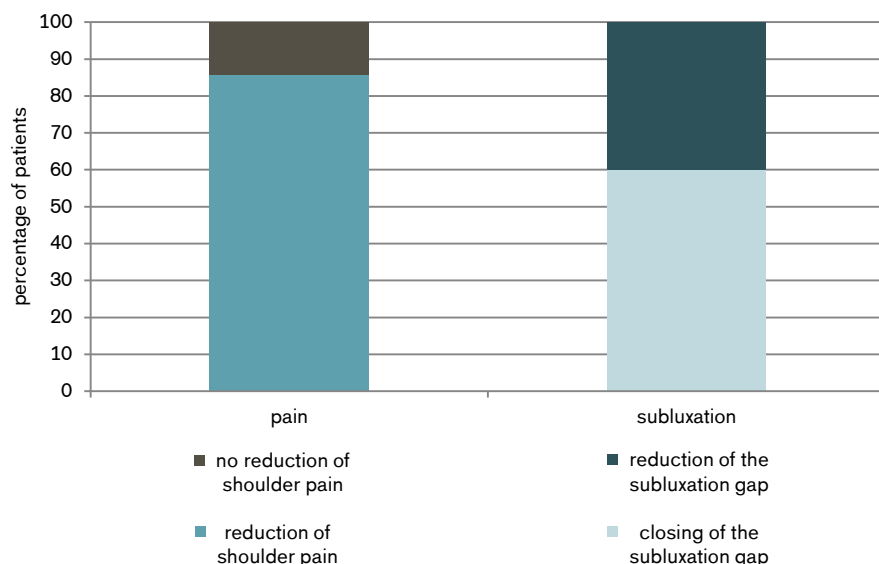
42% of patients showed a subluxation of the shoulder at the beginning of the intervention phase:

→ **In 40% of patients a reduction of the subluxation gap was observed after the time of intervention**

→ **In 60% of patients, the gap was closed after the time of intervention**

→ **20% of patients developed a painful shoulder (PS) during the intervention period**

### Patients treated with Omo Neurexa suffer less pain



<b>Population</b>	Subjects:	12 patients (1 patient did not wear the orthosis for the whole 4 weeks because of missing efficiency)
	Mean age:	n.a.
	Indication:	hemiparetic patients in the early stages of rehabilitation: Patients did suffer from a subluxation of the shoulder or a painful shoulder

**Study Design** Clinical experience



**Results**

Functions and Activities						Participation
Biomechanics – Static measures	Biomechanics – Gait analysis	X-Ray	EMG	Functional tests	Clinical effects	Satisfaction

Category	Outcomes	Results for Omo Neurexa	Sig.*
Clinical effects	Shoulder pain	59% of patients suffered from a painful shoulder	n.a.
		86% of patients reported a reduction of shoulder pain	n.a.
	Shoulder sub-luxation	42% of patients wore the orthosis because of a shoulder subluxation	n.a.
		60% of patients: closing of the gap	n.a.
		40% of patients: reduction of the gap	n.a.
		20% of patients: development of shoulder pain	n.a.
Concentration	Protection of the paretic arm leads to a better concentration on gait rehabilitation	n.a.	
Satisfaction	Wearing comfort	Patients perceived the material of the orthosis as comfortable on the skin.  → no pressure scores, chafe marks or other adverse reactions (especially no relevant increase of spasticity within the upper extremity, no stiffening of the shoulder, no excessive swelling of the hand, no skin irritations or redness)	n.a.
		Odour nuisance Minimal odour nuisance due to transpiration	n.a.

\* no difference (0), positive trend (+), negative trend (-), significant (++/--), not applicable (n.a.)

**Author's Conclusion**

“In conclusion the orthosis is an interesting option in the treatment and prevention of shoulder pain of the severely affected arm after stroke. Further studies are needed.” (Hesse et al. 2008)

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