

## 1. Literaturverzeichnis

1. **Ada, L. & O`Dwyer, N. (2001).** Do associated reactions in the upper limb after stroke contribute to contracture formation? *Clinical Rehabilitation*, 15, 186 – 194.
2. **Ada, L. & O`Dwyer, N. & O`Neil, E. (2006).** Relation between spasticity, weakness and contracture of the elbow flexors and upper limb activity after stroke: An observational study. *Disab and Rehabil.*, 28(13-14), 891 – 97.
3. **Adams, MM. & Hicks, AL. (2005).** Spasticity after spinal cord injury. *Spinal Cord*, 43, 577 -586..
4. **Akosile C.O., Fabunmi A.A., (2011)** Pathophysiology, Functional Implications and Management of Spasticity in Stroke - A review *AJPARS* Vol. 3, No. 1, June 2011, pp. 6-12
5. **Barreca, S. & Wolf, SL. & Fosoli, S. & Bohannicht, R. (2003).** Treatment interventions for the paretic upper limb of stroke survivors: a critical review. *Neurorehabil Neural Repair*, 17 (4), 220-226.
6. **Bhakta B. B. (2000).** Management of spasticity in stroke. *British Medical Bulletin*, 476-485
7. **Bhakta, BB. & Cozens, JA. & Chamberlain, MA. & Bamford, JM. (2001).** Quantifying associated reactions in the paretic arm in stroke and their relationship to spasticity. *Clinic Rehabil*, 15, 195-206.
8. **Bhakta, BB. & O'Connor, RJ. & Cozens, JA. (2008).** Associated reactions after stroke: a randomized controlled trial of the effect of botulinum toxin type A. *Journal of Rehabilitation Medicine* 40(1),36-41.
9. **Bohannicht, RW. & Smith, MB (1987a).** Interrater reliability of a modified Ashworth scale of muscle spasticity. *Phys Ther*, 67 (2), 206-207.
10. **Boissy, P. & Bourbonnais, D. & Kaegi, C. & Arsenault, BA. (1997).** Characterization of global synkineses during hand grip in hemiparetic patients. *Arch Phys Med Rehabil*, 78 (10), 1117-24.
11. **Brown, P. (1994).** Pathophysiology of spasticity. *J Neurol Neurosurg Psychiatry*, 57, 773-77.
12. **Burne, JA. & Carleton, VL. & O`Dwyer, NJ. (2005).** The spasticity paradox, movement disorder or disorder of a resting limbs? *J Neurol Neurosurg Psychiatry*, 76,47-54.
13. **Carr, JH. & Sheperd, RB. (2003).** *Stroke rehabilitation. Guidelines for exercise and training to optimize motor skill.* Oxford: Butterworth Heinemann.
14. **Dewald, JPA. & Rymer, WZ. (1993).** Factors underlying posture and movement in spastic hemiparesis.in *Spasticity: mechanisms and measurement.* Thilman A, Burke D, Rymer WZ. Stuttgart-New York: Springer Verlag. p. 123-138.
15. **Dickstein, R. (2008).** Rehabilitation of gait speed after stroke: a critical review of intervention approach. *Neurorehabil Neural Repair*, 22(6), 649-60.
16. **Dickstein, R. & Heffes, Y. & Abulaffio, N. (1996).** Electromyographic and positional changes in the elbow of spastic hemiparetic patients during walking. *Electroencephalography and clinical Neurophysiology*,101, 491 – 496.

17. **Dickstein, R. & Pillar, T. & Abulaffio N. (1995).** Electromyographic Activity of the Biceps Brachii Muscle and Elbow Flexion during Associated Reaction in Hemiparetic Patients. *Am J Phys Med Rehabil*, 6, 427 -431.
18. **Dietz, V. (1998).** Syndrom der Spastischen Parese. In Brandt, T. & Dichgans, J. & Diener, C. ( Hrsg.). *Therapie und Verlauf urologischer Erkrankungen*. Stuttgart: Kohlhammer
19. **Dietz, V. & Trippel, M. & Berger, W. (1991).** Reflex activity and muscle tone during elbow movements in patient with spastic paresis. *Ann Neurol*, 30, 767-78.
20. **Dvir, Z. & Panturin, E. (1993).** Measurement of spasticity and associated reactions in stroke patients before and after physiotherapeutic intervention. *Clinical Rehabil*, 7, 15-21.
21. **Edwards, Susan (2001).** *Neurological physiotherapy. a problem-solving approach*, 2 Auf HYPERLINK "[http://strokengine.ca/assess/module\\_bbt\\_indepth-en.html](http://strokengine.ca/assess/module_bbt_indepth-en.html)". Edinburg: Churchill Livingstone,
22. **Esqueanazi, A. & Cioni, M. & Mayer NM. (2010).** Assessment of muscle overactivity and spasticity with dynamic polyelectromyography and motion Analysis. *The Open Reab J.*, 3,143-148.
23. **Forsberg, H. & Hirschfeld, H. (1994).** Postural adjustments in sitting humans following external perturbation. muscle activity and kinematics. In *Exp Brain Res*, 97, 515–527
24. **Fries, W. & Freivogel, S. & Beck, B. (2005).** *Motorische Rehabilitation*. In Frommelt, P. & Grötzbach H. ( Hrsg.). *Neuro Rehabilitation 2 Aufl*. Berlin, Wien: Blackwell-Wissenschafts-Verlag
25. **Geurts, ACH. & de Haart, M. & van Nes, IJW. & Duysens, J. (2005).** A review of standing balance recovery from stroke. *Gait&Posture* 22, 267-281.
26. **Ghez, C. & Krakauer, J. (2000).** The organization of movement. In Kandel, ER. & Schwartz, JH. & Jessell, TM. (Hrsg.). *Principles of neural science*. New York: McGraw-Hill
27. **Gregson, JM. & Leathley, M. & Moore, AP. & Sharma, AK. & Smith, TL. & Watkins, CL. (1999).** Reliability of the Tone Assessement Scale and the modified Ashworth scal as clinical tools for assessing poststroke spasticity. *Arch Phys Med Rehabil*, 80 (9), 1013-1016.
28. **Graziadio, S. & Tomasevic, L. & Assenza, G. & Vecchio, F. & Eyre, J.A. ( 2012 )** **The myth of the unaffected side after unilateral stroke: Is reorganization of the non-infarct corticospinal system to re-establish balance the price for recovery.** *Experimental Neurology* 238, 168-175
29. **Hofheinz, M. & Milbs, M. & Elsner, B. (2011).** *BalanceTraining nach Schlaganfall*. In Mehrhoz, J. (Hrsg.). *Neuroreha nach Schlaganfall*. (S. 97). Stuttgart: Thieme-Verlag
30. **Honaga, K. & Masakado, Y. & Oki, T. & Hirabara, Y. & Fujiwara, T. & Ota, T. & Kimura, A. & Liu, M. (2007).** Associated reaction and spasticity among patients with stroke. *Am J Phys Med Rehab.*, 86(8), 656-61.
31. **Horak, FB. (2006).** Postural orientation and equilibrium. what do we need to know about neural control of balance to prevent falls? *Age Ageing.*,35 Suppl, 2:ii7-ii11.
32. **Horak, FB. & Nashner, LM. (1986).** Central programming of postural movements. adaptation to altered support-surface configurations. *J Neurophysiol.*, 55(6), 1369-81.

33. **Ibrahim, IK. & Berger, W. & Trippel, M. & Dietz, V. (1993).** Stretch-induced electromyographic activity and torque in spastic elbow muscles. Differential modulation of reflex activity in passive and active motor task. *Brain*, 116, 971 – 89.
34. **Jungermann Marc (2013).** Medizin Online – Neurologie Online – Schlaganfall, [www.dr-gumpert.de/html/schlaganfall.html](http://www.dr-gumpert.de/html/schlaganfall.html) (11.04.13)
35. **Kehder, A. & Nair, KPS. (2012).** Spasticity.pathophysiology, evaluation and management. *Practical Neurology*,12, 289–298.
36. **Kim, YH. & Jang, SH. & Chang, Y. & Byun WM. & Son, S. & Ahn, SH. (2003).** Bilateral primary sensori-motor cortex activation of post-stroke mirror movements: an fMRI study. *Neuroreport*,14(10), 1329-32.
37. **Kollen, B. & van de Port, I. & Lindeman, E. & Twisk, J. & Kwakkel ,G. (2005).** Predicting Improvement in Gait After Stroke: A Longitudinal Prospective Study. *Stroke*, 36, 2676–2680.
38. **Kwakkel, G. & Kollen, BJ. & van der Ground, J. & Prevo, AJH. (2003).** Probability of regaining dexterity in the flaccid upper limb: Impact of severity of paresis and time since onset in acute stroke. *Stroke*, 34, 2181-2186.
39. **Lance, JW. (1980).** Pathophysiology of spasticity and clinical expirience with Baclofen. In Lance, JW. & Feldman, RG. & Young, RR. (Hrsg.). *Spasticity, disordered motor control*. Chicago: Year Book, 185- 204-
40. **Lazarus, JC. (1992).** Associated movement in hemiplegia, The effect of force exterted, limb usage and inhibitorical training. *Arch Phys Med Rehabil.*, 73, 1044-49.
41. **Lipert, J. & Hamzei, F. & Weiller, C. (2000).** Motor cortex disinhibition of the unaffected hemisphere after acute stroke. *Muscle Nerv*, 23,1761-1763.
42. **Maura, R. & Fukujima, MM. & Aguiar, AS. & Fontes, SV. & Dauar, RFB. & Prado, GF. (2009).** Predictive factors for spasticity among ischemic stroke patients. *Arq Neuropsiquiatr*, 67(4), 1029-1036
43. **Mayer, NH. (1997).** Clinicophysilogic concepts of spasticity and motor dysfunction in adults with an upper motoneuron lesion. *Muscle Nerve*, 6, 1-13.
44. **Meinders, M. & Price, R. & Lehmann, J. & Questad, K. (1996).** The stretch reflex response in the normal and spastic ankle. Effect of ankle position. *Arch Phys Med Rehabil*, 77, 487-92.
45. **Mirbagheri, MM. & Settle, K. & Harvey, R. & Rymer, WZ. (2007).** Neuromuscular Abnormalities Asssociated with Spasticity of the Upper Extremity Muscles in Hemiparetic Stroke. *J Neurophysiol.*, 98, 629-637.
46. **Mulley G. (1982).** Associated reaction in the hemiplegic arm. *Scand. J. Rehab. Med.*, 14, 117-120.
47. **Nakayama, H. & Jorggensen, HS. % Raaschou, HO. & Olsen, TS. (1994).** Recorvery of upper extremity function in stroke patients: The Copenhagen Study. *Arch Phys Med Rehabil*, 75, 394-398.
48. **Nashner, LM. (1982).** Adaptation of human movement to altered environments. *Trends Neurosc*, 5, 358-361. .
49. **O`Dwyer, NJ. & Ada, L. & Neilson, PD. (1996).** Spasticity and muscle contracture following stroke. *Brain*, 119, 676-85.

50. **Parvataneni, K. & Olney, SJ & Brouwer, B. (2007).** Changes in muscle group work associated with changes in gait speed of persons with stroke. *Clin Biomech (Bristol, Avon)*, 22(7), 813-20.
51. **Pak S, Patten C. (2008)** Strengthening to promote functional recovery post stroke: an evidence based review. *Top Stroke Rehabil*;15:177–99
52. **Rack, PMH. & Ross, HF. & Thilmann, AF. (1984).** The ankle stretch reflexes in normal and spastic subjects. The response to sinusoidal movement. *Brain*, 107, 637-54.
53. **Rymer, WZ. & Powers, RK. (1989).** Pathophysiology of muscular hypertonia in spasticity. *Neurosurg State art Rev*, 4, 291-301.
54. **Selzer, M. & Clarke, S. & Cohen, LG. & Ducan, PW. & Gage, FH. (Hrsg.)(2006).** Textbook of Neural Repair and Rehabilitation. *Medical Neurorehabilitation*. Cambridge: Cambridge University Press
55. **Sheean, G.(2008).** Neurophysiology of spasticity. In Barnes, MP. & Johnson, GR. (Hrsg.), *Upper Motor Neurone Syndrome and Spasticity. Clinical Management and Neurophysiology*, 9-64. Cambridge: University Press, 2. Aufl.
56. **Shimizu, T. & Hosaki, A. & Hino, T. & Sato, M. & Komori, T. & Hirai, S. & Rossini, PM. ( 2002).** Motor cortical disinhibition in the unaffected hemisphere after unilateral cortical stroke. *Brain*, 125 (pt 8),1896-1907.
57. **Shumway-Cook, A. & Woollacott, MH. (2007).** *Motor Control. Translating Research into Clinical Practise (3 Aufl.)*. Philadelphia: Lippicott Williams & Wilkins