

CLNEG058: Neurorehabilitation

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1.

Murphy, T.H., Corbett, D.: Plasticity during stroke recovery: from synapse to behaviour. *Nature Reviews Neuroscience*. 10, 861–872 (2009). <https://doi.org/10.1038/nrn2735>.

2.

Ward, N.S.: Restoring brain function after stroke — bridging the gap between animals and humans. *Nature Reviews Neurology*. 13, 244–255 (2017). <https://doi.org/10.1038/nrneurol.2017.34>.

3.

Reinkensmeyer, D.J., Burdet, E., Casadio, M., Krakauer, J.W., Kwakkel, G., Lang, C.E., Swinnen, S.P., Ward, N.S., Schweighofer, N.: Computational neurorehabilitation: modeling plasticity and learning to predict recovery. *Journal of NeuroEngineering and Rehabilitation*. 13, (2016). <https://doi.org/10.1186/s12984-016-0148-3>.

4.

Steven R Zeiler: The interaction between training and plasticity in the post-stroke brain. *Current opinion in neurology*. 26, (2013). <https://doi.org/10.1097/WCO.0000000000000025>.

5.

Kitago, T., Krakauer, J.W.: Motor learning principles for neurorehabilitation. In: *Neurological Rehabilitation*. pp. 93–103. Elsevier (2013). <https://doi.org/10.1016/B978-0-444-52901-5.00008-3>.

6.

Carmichael, S.T.: Brain Excitability in Stroke. *Archives of Neurology*. 69, (2012).
<https://doi.org/10.1001/archneurol.2011.1175>.

7.

Ward, N.S.: Does neuroimaging help to deliver better recovery of movement after stroke? *Current Opinion in Neurology*. 28, 323–329 (2015).
<https://doi.org/10.1097/WCO.0000000000000223>.

8.

Archy O. de Berker: Predicting the behavioral impact of transcranial direct current stimulation: issues and limitations. *Frontiers in Human Neuroscience*. 7, (2013).
<https://doi.org/10.3389/fnhum.2013.00613>.

9.

Bhogal, S.K., Teasell, R., Speechley, M., Albert, M.L.: Intensity of Aphasia Therapy, Impact on Recovery * Aphasia Therapy Works! *Stroke*. 34, 987–993 (2003).
<https://doi.org/10.1161/01.STR.0000062343.64383.D0>.

10.

Brady, M.C., Kelly, H., Godwin, J., Enderby, P., Campbell, P.: Speech and language therapy for aphasia following stroke. *Cochrane Database of Systematic Reviews*. (2016).
<https://doi.org/10.1002/14651858.CD000425.pub4>.

11.

Breitenstein, C., Grewe, T., Flöel, A., Ziegler, W., Springer, L., Martus, P., Huber, W., Willmes, K., Ringelstein, E.B., Haeusler, K.G., Abel, S., Glindemann, R., Domahs, F., Regenbrecht, F., Schlenck, K.-J., Thomas, M., Obrig, H., de Langen, E., Rocker, R., Wigbers, F., Rühmkorf, C., Hemen, I., List, J., Baumgaertner, A., Villringer, A., Bley, M., Jöbges, M., Halm, K., Schulz, J., Werner, C., Goldenberg, G., Klingenberg, G., König, E., Müller, F., Gröne, B., Knecht, S., Baake, R., Knauss, J., Miethe, S., Steller, U., Sudhoff, R., Schillikowski, E., Pfeiffer, G., Billo, K., Hoffmann, H., Ferneding, F.-J., Runge, S., Keck, T., Middeldorf, V., Krüger, S.: Intensive speech and language therapy in patients with chronic aphasia after stroke: a randomised, open-label, blinded-endpoint, controlled trial in a health-care setting. *The Lancet*. 389, 1528–1538 (2017).
[https://doi.org/10.1016/S0140-6736\(17\)30067-3](https://doi.org/10.1016/S0140-6736(17)30067-3).

12.

Dignam, J., Copland, D., McKinnon, E., Burfein, P., O'Brien, K., Farrell, A., Rodriguez, A.D.: Intensive Versus Distributed Aphasia Therapy. *Stroke*. 46, 2206–2211 (2015).
<https://doi.org/10.1161/STROKEAHA.115.009522>.

13.

Berthier, M.L.: Cognitive enhancing drugs in aphasia: A vote for hope. *Aphasiology*. 28, 128–132 (2014). <https://doi.org/10.1080/02687038.2013.857756>.

14.

Bhogal, S.K., Teasell, R., Speechley, M., Albert, M.L.: Intensity of Aphasia Therapy, Impact on Recovery * Aphasia Therapy Works! *Stroke*. 34, 987–993 (2003).
<https://doi.org/10.1161/01.STR.0000062343.64383.D0>.

15.

Brady, M.C., Kelly, H., Godwin, J., Enderby, P., Campbell, P.: Speech and language therapy for aphasia following stroke. *Cochrane Database of Systematic Reviews*. (2016).
<https://doi.org/10.1002/14651858.CD000425.pub4>.

16.

Klonoff, P.S.: *Psychotherapy after brain injury: principles and techniques*. The Guilford Press, New York (2010).

17.

Quality Assurance Standards for physiotherapy service delivery | The Chartered Society of Physiotherapy, <http://www.csp.org.uk/publications/quality-assurance-standards>.

18.

Code of ethics and professional conduct,
https://www.rcot.co.uk/sites/default/files/CODE-OF-ETHICS-2015_0.pdf.

19.

James, S.E.F., M.: Contractures in orthopaedic and neurological conditions: a review of causes and treatment. *Disability and Rehabilitation*. 23, 549–558 (2001).
<https://doi.org/10.1080/09638280010029930>.

20.

Harvey, L., de Jong, I., Goehl, G., Marwedel, S.: Twelve weeks of nightly stretch does not reduce thumb web-space contractures in people with a neurological condition: a randomised controlled trial. *Australian Journal of Physiotherapy*. 52, 251–258 (2006).
[https://doi.org/10.1016/S0004-9514\(06\)70004-6](https://doi.org/10.1016/S0004-9514(06)70004-6).

21.

Kilbride, C., Hoffman, K., Baird, T., Tuckey, J., Marston, L., Souza, L.D.: Contemporary splinting practice in the UK for adults with neurological dysfunction: A cross-sectional survey. *International Journal of Therapy and Rehabilitation*. 20, 559–566 (2013).
<https://doi.org/10.12968/ijtr.2013.20.11.559>.

22.

Lannin, N.A., Horsley, S.A., Herbert, R., McCluskey, A., Cusick, A.: Splinting the hand in the functional position after brain impairment: A randomized, controlled trial. *Archives of Physical Medicine and Rehabilitation*. 84, 297–302 (2003).
<https://doi.org/10.1053/apmr.2003.50031>.

23.

Lannin, N.A., Cusick, A., McCluskey, A., Herbert, R.D.: Effects of Splinting on Wrist Contracture After Stroke: A Randomized Controlled Trial. *Stroke*. 38, 111–116 (2007).
<https://doi.org/10.1161/01.STR.0000251722.77088.12>.

24.

PA Mortenson: The use of casts in the management of joint mobility and hypertonia following brain injury in adults: a systematic review. (2003).

25.

Moorhouse, P., Rockwood, K.: Vascular cognitive impairment: current concepts and clinical developments. *The Lancet Neurology*. 7, 246–255 (2008).
[https://doi.org/10.1016/S1474-4422\(08\)70040-1](https://doi.org/10.1016/S1474-4422(08)70040-1).

26.

Rehabilitation of cognitive impairment post stroke,
http://www.ebrsr.com/sites/default/files/Chapter%205_Cognitive.pdf.

27.

Chaudhuri, A., Behan, P.O.: Fatigue in neurological disorders. *The Lancet*. 363, 978–988 (2004). [https://doi.org/10.1016/S0140-6736\(04\)15794-2](https://doi.org/10.1016/S0140-6736(04)15794-2).

28.

Duncan, F., Wu, S., Mead, G.E.: Frequency and natural history of fatigue after stroke: A systematic review of longitudinal studies. *Journal of Psychosomatic Research*. 73, 18–27 (2012). <https://doi.org/10.1016/j.jpsychores.2012.04.001>.

29.

De Doncker, W., Dantzer, R., Ormstad, H., Kuppuswamy, A.: Mechanisms of poststroke fatigue. *Journal of Neurology, Neurosurgery & Psychiatry*. (2017).
<https://doi.org/10.1136/jnnp-2017-316007>.

30.

Kuppuswamy, A.: The fatigue conundrum. *Brain*. 140, 2240–2245 (2017).
<https://doi.org/10.1093/brain/awx153>.

31.

Kuppuswamy, A., Clark, E.V., Turner, I.F., Rothwell, J.C., Ward, N.S.: Post-stroke fatigue: a deficit in corticomotor excitability? *Brain*. 138, 136–148 (2015).
<https://doi.org/10.1093/brain/awu306>.

32.

Kuppuswamy, A., Clark, E., Rothwell, J., Ward, N.S.: Limb Heaviness. *Neurorehabilitation and Neural Repair*. 30, 360–362 (2016). <https://doi.org/10.1177/1545968315597071>.

33.

Clinical Guidelines for Stroke Management 2017, <https://informme.org.au/Guidelines/Clinical-Guidelines-for-Stroke-Management-2017>.

34.

Howlett, O.A., Lannin, N.A., Ada, L., McKinstry, C.: Functional Electrical Stimulation Improves Activity After Stroke: A Systematic Review With Meta-Analysis. *Archives of Physical Medicine and Rehabilitation*. 96, 934–943 (2015). <https://doi.org/10.1016/j.apmr.2015.01.013>.

35.

Lee, J.-H., Baker, L.L., Johnson, R.E., Tilson, J.K.: Effectiveness of neuromuscular electrical stimulation for management of shoulder subluxation post-stroke: a systematic review with meta-analysis. *Clinical Rehabilitation*. 31, 1431–1444 (2017). <https://doi.org/10.1177/0269215517700696>.

36.

Nascimento, L.R., Michaelsen, S.M., Ada, L., Polese, J.C., Teixeira-Salmela, L.F.: Cyclical electrical stimulation increases strength and improves activity after stroke: a systematic review. *Journal of Physiotherapy*. 60, 22–30 (2014). <https://doi.org/10.1016/j.jphys.2013.12.002>.

37.

Pollock, A., Farmer, S.E., Brady, M.C., Langhorne, P., Mead, G.E., Mehrholz, J., van Wijck, F.: Interventions for improving upper limb function after stroke. *Cochrane Database of Systematic Reviews*. (2014). <https://doi.org/10.1002/14651858.CD010820.pub2>.

38.

Rushton, D.N.: Functional Electrical Stimulation and rehabilitation—an hypothesis. *Medical*

Engineering & Physics. 25, 75–78 (2003). [https://doi.org/10.1016/S1350-4533\(02\)00040-1](https://doi.org/10.1016/S1350-4533(02)00040-1).

39.

Stein, C., Fritsch, C.G., Robinson, C., Sbruzzi, G., Plentz, R.D.M.: Effects of Electrical Stimulation in Spastic Muscles After Stroke. *Stroke*. 46, 2197–2205 (2015). <https://doi.org/10.1161/STROKEAHA.115.009633>.

40.

Vafadar, A.K., Côté, J.N., Archambault, P.S.: Effectiveness of Functional Electrical Stimulation in Improving Clinical Outcomes in the Upper Arm following Stroke: A Systematic Review and Meta-Analysis. *BioMed Research International*. 2015, 1–14 (2015). <https://doi.org/10.1155/2015/729768>.

41.

Veerbeek, J.M., van Wegen, E., van Peppen, R., van der Wees, P.J., Hendriks, E., Rietberg, M., Kwakkel, G.: What Is the Evidence for Physical Therapy Poststroke? A Systematic Review and Meta-Analysis. *PLoS ONE*. 9, (2014). <https://doi.org/10.1371/journal.pone.0087987>.

42.

The national service framework for long term conditions, <https://www.gov.uk/government/publications/quality-standards-for-supporting-people-with-long-term-conditions>.

43.

James, K.: *The strands of speech and language therapy: weaving a therapy plan for neurorehabilitation*. Speechmark, London (2011).

44.

Ylvisaker, M., Feeney, T.: Reflections on Dobermanns, poodles, and social rehabilitation for difficult-to-serve individuals with traumatic brain injury. *Aphasiology*. 14, 407–431 (2000). <https://doi.org/10.1080/026870300401432>.

45.

Ylvisaker, M., Feeney, T.: Reconstruction of Identity After Brain Injury. *Brain Impairment*. 1, 12–28 (2000). <https://doi.org/10.1375/brim.1.1.12>.

46.

C. Katz, Brooke Hallowell, Chris Co, R.: A multinational comparison of aphasia management practices. *International Journal of Language & Communication Disorders*. 35, 303–314 (2000). <https://doi.org/10.1080/136828200247205>.

47.

Holland, A.L.: *Language disorders in adults: recent advances*. College-Hill Press, San Diego, Calif (1984).

48.

Kleim, J.A., Jones, T.A.: Principles of Experience-Dependent Neural Plasticity: Implications for Rehabilitation After Brain Damage. *Journal of Speech Language and Hearing Research*. 51, (2008). [https://doi.org/10.1044/1092-4388\(2008/018\)](https://doi.org/10.1044/1092-4388(2008/018)).

49.

Journal of Rehabilitation Medicine - Abstract - The arm studio to intensify the upper limb rehabilitation after stroke: Concept, acceptance, utilization and preliminary clinical results, <https://medicaljournals.se/jrm/content/abstract/10.2340/16501977-0517>.

50.

Liao, W., Wu, C., Hsieh, Y., Lin, K., Chang, W.: Effects of robot-assisted upper limb rehabilitation on daily function and real-world arm activity in patients with chronic stroke: a randomized controlled trial. *Clinical Rehabilitation*. 26, 111–120 (2012). <https://doi.org/10.1177/0269215511416383>.

51.

Journal of Rehabilitation Medicine - Abstract - Evaluation of functional outcome measures

for the hemiparetic upper limb: A systematic review,
<https://www.medicaljournals.se/jrm/content/abstract/10.2340/16501977-0276>.

52.

Baker, K., Cano, S.J., Playford, E.D.: Outcome Measurement in Stroke: A Scale Selection Strategy. *Stroke*. 42, 1787–1794 (2011). <https://doi.org/10.1161/STROKEAHA.110.608505>.

53.

Buchbinder, R., Green, S., Youd, J.M., Johnston, R.V., Cumpston, M.: Arthrographic distension for adhesive capsulitis (frozen shoulder). *Cochrane Database of Systematic Reviews*. (2008). <https://doi.org/10.1002/14651858.CD007005>.

54.

Subhasish Chatterjee: The California Tri-pull Taping Method in the Treatment of Shoulder Subluxation After Stroke: A Randomized Clinical Trial. *North American Journal of Medical Sciences*. 8, (2016). <https://doi.org/10.4103/1947-2714.179933>.

55.

Chae, J., Mascarenhas, D., Yu, D.T., Kirsteins, A., Elovic, E.P., Flanagan, S.R., Harvey, R.L., Zorowitz, R.D., Fang, Z.-P.: Poststroke Shoulder Pain: Its Relationship to Motor Impairment, Activity Limitation, and Quality of Life. *Archives of Physical Medicine and Rehabilitation*. 88, 298–301 (2007). <https://doi.org/10.1016/j.apmr.2006.12.007>.

56.

Gamble, G.E., Barberan, E., Bowsher, D., Tyrrell, P.J., Jones, A.K.P.: Post stroke shoulder pain: more common than previously realized. *European Journal of Pain*. 4, 313–315 (2000). <https://doi.org/10.1053/eujp.2000.0192>.

57.

Green, S., Buchbinder, R., Hetrick, S.E.: Physiotherapy interventions for shoulder pain. *Cochrane Database of Systematic Reviews*. (2003). <https://doi.org/10.1002/14651858.CD004258>.

58.

Effects of neuromuscular electrical stimulation on arterial hemodynamic properties and body composition in paretic upper extremities of patients with subacute stroke, http://biomedj.cgu.edu.tw/pdfs/2014/37/4/images/BiomedJ_2014_37_4_205_117892.pdf.

59.

Use of an integrated care pathway: a third round audit of the management of shoulder pain in neurological conditions, <https://medicaljournals.se/jrm/content/abstract/10.1080/16501970310012446>.

60.

McDonald, S., Togher, L., Code, C.: Social and communication disorders following traumatic brain injury. Psychology Press, Taylor & Francis Group, London (2014).

61.

Mateer, C.A., Sira, C.S., O'Connell, M.E.: Putting Humpty Dumpty Together Again. *Journal of Head Trauma Rehabilitation*. 20, 62–75 (2005). <https://doi.org/10.1097/00001199-200501000-00007>.

62.

Tornås, S., Løvstad, M., Solbakk, A.-K., Evans, J., Endestad, T., Hol, P.K., Schanke, A.-K., Stubberud, J.: Rehabilitation of Executive Functions in Patients with Chronic Acquired Brain Injury with Goal Management Training, External Cuing, and Emotional Regulation: A Randomized Controlled Trial. *Journal of the International Neuropsychological Society*. 22, 436–452 (2016). <https://doi.org/10.1017/S1355617715001344>.

63.

McMillan, T.M., Wood, R.L. eds: Neurobehavioural disability and social handicap following traumatic brain injury. Routledge, London (2017).

64.

Winegardner, J., Keohane, C., Prince, L., Neumann, D.: Perspective training to treat anger problems after brain injury: Two case studies. *NeuroRehabilitation*. 39, 153–162 (2016). <https://doi.org/10.3233/NRE-161347>.

65.

Cipolotti, L., Warrington, E.K.: Neuropsychological assessment. *Journal of Neurology, Neurosurgery & Psychiatry*. 58, 655–664 (1995). <https://doi.org/10.1136/jnnp.58.6.655>.

66.

Sachdev, P.S., Lipnicki, D.M., Crawford, J.D., Wen, W., Brodaty, H.: Progression of cognitive impairment in stroke/TIA patients over 3 years. *Journal of Neurology, Neurosurgery & Psychiatry*. 85, 1324–1330 (2014). <https://doi.org/10.1136/jnnp-2013-306776>.

67.

Nys, G.M.S., van Zandvoort, M.J.E., de Kort, P.L.M., van der Worp, H.B., Jansen, B.P.W., Algra, A., de Haan, E.H.F., Kappelle, L.J.: The prognostic value of domain-specific cognitive abilities in acute first-ever stroke. *Neurology*. 64, 821–827 (2005). <https://doi.org/10.1212/01.WNL.0000152984.28420.5A>.

68.

Hurford, R., Charidimou, A., Fox, Z., Cipolotti, L., Werring, D.J.: Domain-specific trends in cognitive impairment after acute ischaemic stroke. *Journal of Neurology*. 260, 237–241 (2013). <https://doi.org/10.1007/s00415-012-6625-0>.

69.

Van Heugten, C.M., Walton, L., Hentschel, U.: Can we forget the Mini-Mental State Examination? A systematic review of the validity of cognitive screening instruments within one month after stroke. *Clinical Rehabilitation*. 29, 694–704 (2015). <https://doi.org/10.1177/0269215514553012>.

70.

Manually add a new bookmark | University College London,
<http://readinglists.ucl.ac.uk/ui/forms/bookmarklet.html?fast=true&title=Journal%20of%20Rehabilitation%20Medicine%20-%20Abstract%20-%20Screening%20for%20cognitive%20impairment%20after%20stroke%3A%20A%20systematic%20review%20of%20psycho>

metric%20properties%20and%20clinical%20utility&uri=https%253A%252F%252Fwww.medicaljournals.se%252Fjrm%252Fcontent%252Fabstract%252F10.2340%252F16501977-1930.

71.

Chan, E., Altendorff, S., Healy, C., Werring, D.J., Cipolotti, L.: The test accuracy of the Montreal Cognitive Assessment (MoCA) by stroke lateralisation. *Journal of the Neurological Sciences*. 373, 100–104 (2017). <https://doi.org/10.1016/j.jns.2016.12.028>.

72.

Chan, E., Khan, S., Oliver, R., Gill, S.K., Werring, D.J., Cipolotti, L.: Underestimation of cognitive impairments by the Montreal Cognitive Assessment (MoCA) in an acute stroke unit population. *Journal of the Neurological Sciences*. 343, 176–179 (2014). <https://doi.org/10.1016/j.jns.2014.05.005>.

73.

Craig, P., Dieppe, P., Macintyre, S., Michie, S., Nazareth, I., Petticrew, M.: Developing and evaluating complex interventions: the new Medical Research Council guidance. *BMJ*. (2008). <https://doi.org/10.1136/bmj.a1655>.

74.

Katz, R.C., Wertz, R.T.: The Efficacy of Computer-Provided Reading Treatment for Chronic Aphasic Adults. *Journal of Speech Language and Hearing Research*. 40, (1997). <https://doi.org/10.1044/jslhr.4003.493>.

75.

Marshall, J., Booth, T., Devane, N., Galliers, J., Greenwood, H., Hilari, K., Talbot, R., Wilson, S., Woolf, C.: Evaluating the Benefits of Aphasia Intervention Delivered in Virtual Reality: Results of a Quasi-Randomised Study. *PLOS ONE*. 11, (2016). <https://doi.org/10.1371/journal.pone.0160381>.

76.

Palmer, R., Enderby, P., Cooper, C., Latimer, N., Julious, S., Paterson, G., Dimairo, M., Dixon, S., Mortley, J., Hilton, R., Delaney, A., Hughes, H.: Computer Therapy Compared

With Usual Care for People With Long-Standing Aphasia Poststroke: A Pilot Randomized Controlled Trial. *Stroke*. 43, 1904–1911 (2012).
<https://doi.org/10.1161/STROKEAHA.112.650671>.

77.

Varley, R., Cowell, P.E., Dyson, L., Inglis, L., Roper, A., Whiteside, S.P.: Self-Administered Computer Therapy for Apraxia of Speech. *Stroke*. (2016).
<https://doi.org/10.1161/STROKEAHA.115.011939>.

78.

Bowen, A., Hazelton, C., Pollock, A., Lincoln, N.B.: Cognitive rehabilitation for spatial neglect following stroke. *Cochrane Database of Systematic Reviews*. (2013).
<https://doi.org/10.1002/14651858.CD003586.pub3>.

79.

Corbetta, M., Kincade, M.J., Lewis, C., Snyder, A.Z., Sapir, A.: Neural basis and recovery of spatial attention deficits in spatial neglect. *Nature Neuroscience*. 8, 1603–1610 (2005).
<https://doi.org/10.1038/nn1574>.

80.

Ferro, J.M., Mariano, G., Madureira, S.: Recovery from Aphasia and Neglect. *Cerebrovascular Diseases*. 9, 6–22 (1999). <https://doi.org/10.1159/000047571>.

81.

Frassinetti, F., Angeli, V., Meneghello, F., Avanzi, S., Ladavas, E.: Long-lasting amelioration of visuospatial neglect by prism adaptation. *Brain*. 125, 608–623 (2002).
<https://doi.org/10.1093/brain/awf056>.

82.

Gorgoraptis, N., Mah, Y.-H., Machner, B., Singh-Curry, V., Malhotra, P., Hadji-Michael, M., Cohen, D., Simister, R., Nair, A., Kulinskaya, E., Ward, N., Greenwood, R., Husain, M.: The effects of the dopamine agonist rotigotine on hemispatial neglect following stroke. *Brain*. 135, 2478–2491 (2012). <https://doi.org/10.1093/brain/aws154>.

83.

Kaplan, R.F., Verfaellie, M., Meadows, M.-E., Caplan, L.R., Pessin, M.S., DeWitt, L.D.: Changing Attentional Demands in Left Hemispatial Neglect. *Archives of Neurology*. 48, 1263–1266 (1991). <https://doi.org/10.1001/archneur.1991.00530240067023>.

84.

Kerkhoff, G., Bucher, L., Brasse, M., Leonhart, E., Holzgraefe, M., Völzke, V., Keller, I., Reinhart, S.: Smooth Pursuit "Bedside" Training Reduces Disability and Unawareness During the Activities of Daily Living in Neglect. *Neurorehabilitation and Neural Repair*. 28, 554–563 (2014). <https://doi.org/10.1177/1545968313517757>.

85.

Koiava, N., Ong, Y.-H., Brown, M.M., Acheson, J., Plant, G.T., Leff, A.P.: A 'web app' for diagnosing hemianopia. *Journal of Neurology, Neurosurgery & Psychiatry*. 83, 1222–1224 (2012). <https://doi.org/10.1136/jnnp-2012-302270>.

86.

Grieve, J.I.: *Neuropsychology for occupational therapists: cognition in occupational performance*. Wiley Blackwell, Hoboken, NJ, USA (2017).

87.

Gillen, G., *St Bartholomew School of Nursing and Midwifery: Cognitive and perceptual rehabilitation: optimizing function*. Mosby/Elsevier, St. Louis, Mo (2009).

88.

Amy J. Bastian: Understanding sensorimotor adaptation and learning for rehabilitation. *Current opinion in neurology*. 21, (2008). <https://doi.org/10.1097/WCO.0b013e328315a293>.

89.

Bernhardt, J., Thuy, M.N., Collier, J.M., Legg, L.A.: Very early versus delayed mobilisation

after stroke. Cochrane Database of Systematic Reviews. (2009).
<https://doi.org/10.1002/14651858.CD006187.pub2>.

90.

Muscle strength and muscle training after stroke,
<https://www.medicaljournals.se/jrm/content/abstract/10.2340/16501977-0018>.

91.

Carey, L., Macdonell, R., Matyas, T.A.: SENSE: Study of the Effectiveness of Neurorehabilitation on Sensation. *Neurorehabilitation and Neural Repair*. 25, 304–313 (2011). <https://doi.org/10.1177/1545968310397705>.

92.

Connell, L., Tyson, S.: Measures of sensation in neurological conditions: a systematic review. *Clinical Rehabilitation*. 26, 68–80 (2012).
<https://doi.org/10.1177/0269215511412982>.

93.

Connell, L.A., McMahon, N.E., Adams, N.: Stroke survivors' experiences of somatosensory impairment after stroke: An Interpretative Phenomenological Analysis. *Physiotherapy*. 100, 150–155 (2014). <https://doi.org/10.1016/j.physio.2013.09.003>.

94.

Demetrios, M., Khan, F., Turner-Stokes, L., Brand, C., McSweeney, S.: Multidisciplinary rehabilitation following botulinum toxin and other focal intramuscular treatment for post-stroke spasticity. Cochrane Database of Systematic Reviews. (2013).
<https://doi.org/10.1002/14651858.CD009689.pub2>.

95.

Doyle, S., Bennett, S., Fasoli, S.E., McKenna, K.T.: Interventions for sensory impairment in the upper limb after stroke. Cochrane Database of Systematic Reviews. (2010).
<https://doi.org/10.1002/14651858.CD006331.pub2>.

96.

Klemens Fheodoroff: Factors Influencing Goal Attainment in Patients with Post-Stroke Upper Limb Spasticity Following Treatment with Botulinum Toxin A in Real-Life Clinical Practice: Sub-Analyses from the Upper Limb International Spasticity (ULIS)-II Study. *Toxins*. 7, (2015). <https://doi.org/10.3390/toxins7041192>.