

## ESSENTIAL ARTICLES OF PM&R

### STROKE REHABILITATION

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#### Recovery and Rehabilitation Management

**Comprehensive overview of nursing and interdisciplinary rehabilitation care of the stroke patient: A scientific statement from the American Heart Association.**

Miller EL, Murray L, Richards L, Zorowitz RD, Bakas T, Clark P, Billinger SA; on behalf of the American Heart Association Science Advisory and Coordinating Committee. *Stroke* 2010; **41(10):2402-48**. *This is a comprehensive guideline to establish a stroke rehabilitation program with evidence based approach.*

**What is the evidence for physical therapy poststroke? A systematic review and meta-analysis.**

Veerbeek JM, van Wegen E, van Peppen R, van der Wees PJ, Hendriks E, Rietberg M, Kwakkel G. *PLoS ONE* 9(2): e87987. *This article discusses the evidence that are available to various physical therapeutic approaches to post-stroke training and functional mobility.*

**Factors associated with discharge to home versus discharge to institutional care after inpatient stroke rehabilitation.**

Nguyen VQC, PrvuBettger J, Guerrier T, Hirsch MA, Thomas JG, Pugh, TM, Rhoads CF III. *Archives of Physical Medicine and Rehabilitation* 2015;96:1297-303. *This article describes the largest stroke data base study to date of an acute rehabilitation hospital system and the factors that determine a home discharge or institutional discharge.*

**Strengthening to promote functional recovery poststroke: An evidence-based review.**

Pak S, Patten C. *Stroke Rehabil* 2008;15(3):177-199.

**Using aerobic exercise to improve health outcomes and quality of life in stroke: Evidence-based exercise prescription recommendations.**

Pang MYC, Charlesworth SA, Lau RWK, Chung RCK. *Cerebrovasc Dis* 2013;35:7-22.

**Management of hemiplegic shoulder pain.**

Maxwell AMW, Nguyen VQC. *CurrPhys Med Rehabil Rep* 2013;1(1):1-8.

**Botulinum toxin type A for the treatment of the upper limb spasticity after stroke: A meta-analysis.**

Cardoso E, Rodrigues B, Lucena R, Oliveira I, Pedreira G, Melo A. *Arq Neuropsiquiatr* 2005; 63(1):30-33.

**Botulinum toxin type A in post-stroke lower limb spasticity: A multicenter, double-blind, placebo-controlled trial.**

Kaji R, Osako Y, Suyama K, Maeda T, Uechi Y, Iwasaki M. *J Neurol* 2010; 257:1330-1337.

**Functional electrical stimulation improves activity after stroke: A systematic review with meta-analysis.**

Howlett OA, Lannin, NA, Ada L, McKinstry C. *Arch Phys Med Rehabil* 2015;96(5):934-43.

**A Meta-analysis of constraint-induced movement therapy after stroke.**

Thrane G, San C, Friborg O, Anke A, Indredavik B. *J Rehabil Med* 2014;46:833-842.

**A review of spasticity treatments: Pharmacological and interventional approaches.**

Chang E, Ghosh N, Yanni D, Lee S, Alexandru D, Mozaffar T. *Crit Rev Phys Rehabil Med* 2013; 25(1-2):11-22.

**Neuroimaging of ischemic stroke with CT and MRI: Advancing towards physiology-based diagnosis and therapy.**

Hakimelahi R, González RG. *Expert Rev Cardiovasc Ther* 2009;7(1):29-48.

**Music listening enhances cognitive recovery and mood after middle cerebral artery stroke.**

Särkämö T, Tervaniemi M, Laitinen S, Forsblom A, Soinila S, Mikkonen M, Autti T, Silvennoinen H, Erkkilä J, Laine M, Peretz I, Hietanen M. *Brain* 2008; 131:866-76.

**Effectiveness of thigh-length graduated compression stockings to reduce the risk of deep vein thrombosis after stroke (CLOTS Trial 1): A multicentre, randomised controlled trial.**

Dennis M, Sandercock PA, Reid J, Graham C, Murray G, Venables G, Rudd A, Bowler G. *Lancet* 2009; 373(9679):1958-65.

**Effectiveness of Intermittent Pneumatic Compression in Reduction of Risk of Deep Vein Thrombosis in Patients Who Have Had a Stroke (CLOTS 3): A Multicentre Randomised Controlled Trial.**

Dennis M, Sandercock P, Murray G, Forbes J, and on behalf of The CLOTS Trials Collaboration. *Lancet* 2013; 382: 516-24.

**Effect of clopidogrel added to aspirin in patients with atrial fibrillation.**

Connolly SJ, Pogue J, Hart RG, Hohnloser S, Pfeffer M, Chrolavicius S, Yusuf S (The ACTIVE Investigators). *N Engl J Med* 2009; 360(20):2066-78.

**Effect of constraint-induced movement therapy on upper extremity function 3 to 9 Months after stroke: The EXCITE randomized clinical trial.**

Wolf SL, Winstein CJ, Miller JP, Taub E, Uswatte G, Morris D, Giuliani C, Light KE, Nichols-Larsen D. *JAMA* 2006; 296(17):2095-104.

**Peroneal nerve stimulation versus an ankle foot orthosis for correction of footdrop in stroke: Impact on functional ambulation.**

Sheffler LR, et al. *Neurorehabilitation and Neural Repair* 2006;20(3):355-60.

**Secondary Prevention**

**Guidelines for the prevention of stroke in patients with stroke and transient ischemic attack: A guideline for healthcare professionals from the American Heart Association/American Stroke Association.**

Kernan WN, Ovbiagele B, Black HR, Bravata D, Chimowitz M, Ezekowitz M, Fang M, Fisher M, Furie K, Heck D, Johnston C, Kasner S, Kittner S, Mitchell P, Rich M, Richardson D, Schwamm L, Wilson J; on behalf of the American Heart Association/American Stroke Association. *Stroke* 2014; 45:2160-2236. *This comprehensive guideline discusses the evidence available to guide the long-term prevention of post-stroke recurrence.*

**Comparison of warfarin and aspirin for symptomatic intracranial arterial stenosis.**

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**Anticoagulants for preventing recurrence following presumed non-cardioembolic ischaemic stroke or transient ischaemic attack.**

Sanderhock PA, Gibson LM, Liu M. *Cochrane Database Syst Rev* 2009; 15(2):CD000248.

**Risk vs. benefit of anti-thrombotic therapy in ischaemic stroke patients with cerebral microbleeds.**

Soo YO, Yang SR, Lam WW, Fan Y, Leung H, Chan A, Leung C, Leung T, Wong L. *J Neurol* 2008; 255(11):1679-86.

**Statin therapy after first stroke reduces 10-year stroke recurrence and improves survival.**

Milionis HJ, Giannopoulos S, Kosmidou M, Panoulas V, Manios E, Kyritsis A, Elisaf M, Vemmos K. Neurology 2009;72(21):1816-22.

**Efficacy of antiplatelet therapy in secondary prevention following lacunar stroke: Pooled analysis of randomized trials.**

Kwong CS, Shoamanesh A, Copley HC, Myint P, Loke Y, Benavente O. Stroke 2015; 46:1014-1023.

**Acute Management**

**Guidelines for the early management of patients with acute ischemic stroke: A guideline for healthcare professionals from the American Heart Association/American Stroke Association.**

Jauch EC, Saver JL, Adams HP Jr, Bruno A, Connors J, Demaerschalk B, Khatri P, McMullan P, Qureshi A, Rosenfield K, Scott P, Summers D, Wang D, Wintermark M, Yonas H; on behalf of the American Heart Association Stroke Council, Council on Cardiovascular Nursing, Council on Peripheral Vascular Disease, and Council on Clinical Cardiology. Stroke 2013; 44:870-947.

**Expansion of the time window for treatment of acute ischemic stroke with intravenous tissue plasminogen activator. A science advisory from the American Heart Association/American Stroke Association.**

Del Zoppo GJ, Saver JL, Jauch EC, Adams HP Jr. Stroke 2009; 40(8):2945-8.

**Therapy of basilar artery occlusion: A systematic analysis comparing intra-arterial and intravenous thrombolysis.**

Lindsberg PJ, Mattle HP. Stroke 2006; 37:922-928.