

**Deborah Falla: Smerter fører til dysfunktion i de dybe cervikale nakkeflexorer.  
Fysioterapeuten nr. 16 2007, p. 8-12.**

**Referencer**

1. Oatis CA. *Kinesiology: The Mechanics and Pathomechanics of Human Movement*. Philadelphia: Lippincott Williams & Wilkins; 2004.
2. Boyd Clark LC, Briggs CA, Galea MP. Muscle spindle distribution, morphology, and density in longus colli and multifidus muscles of the cervical spine. *Spine* 2002;27(7):694-701.
3. Conley MS, Meyer RA, Bloomberg JJ, Feedback DL, Dudley GA. Noninvasive analysis of human neck muscle function. *Spine* 1995;20(23):2505-2512.
4. Mayoux-Benhamou MA, Revel M, Vallee C, Roudier R, Barbet JP, Barga F. Longus Colli has a postural function on cervical curvature. *Surg Radiol Anat* 1994;16:367-371.
5. Vasavada AN, Li S, Delp SL. Influence of muscle morphometry and moment arms on the moment-generating capacity of human neck muscles. *Spine* 1998;23(4):412-422.
6. Kettler A, Hartwig E, Schultheiss M, Claes L, Wilke HJ. Mechanically simulated muscle forces strongly stabilize intact and injured upper cervical spine specimens. *J Biomech* 2002;35:339-346.
7. Winters JM, Peles JD. Neck muscle activity and 3D head kinematics during quasistatic and dynamic tracking movements. In: Winters JM, Woo SL-Y, editors. *Multiple Muscle Systems: Biomechanics and movement organisation*. New York: Springer-Verlag; 1990. p 461-480.
8. Janda V. Muscles and motor control in cervicogenic disorders: Assessment and Management. In: Grant R, editor. *Physical therapy of the cervical and thoracic spine*. 2nd ed. New York: Churchill Livingstone; 1994. p 195-216.
9. Falla D, Jull G, Dall'Alba P, Rainoldi A, Merletti R. An electromyographic analysis of the deep cervical flexor muscles during cranio-cervical flexion. *Phys Ther* 2003;83:899-906.
10. Jull G, Trott P, Potter H, Zito G, Niere K, Shirley D, Emberson J, Marschner I, Richardson C. A randomized controlled trial of exercise and manipulative therapy for cervicogenic headache. *Spine* 2002;27(17):1835-1843.
11. Jull G, Falla D, Hodges P, Vicenzino B. Cervical flexor muscle retraining: physiological mechanisms of efficacy. 2005; Edinburgh, Scotland.
12. Falla D, Jull G, Hodges P, Vicenzino B. An endurance-strength training regime is effective in reducing myoelectric manifestations of cervical flexor muscle fatigue in females with chronic neck pain. *Clin Neurophysiol* 2006;117:828-837.
13. Falla D, Jull G, Russell T, Vicenzino B, Hodges P. Effect of neck exercise on sitting posture in patients with chronic neck pain. *Phys Ther* 2007;87(4):408-417.
14. Jull G, Sterling M, Kenardy J, Beller E. Does the presence of sensory hypersensitivity influence outcomes of physical rehabilitation for chronic whiplash? - A preliminary RCT. *Pain* 2007; 129(1-2):28-34
15. Jull G, Falla D, Treleaven J, Hodges P, Vicenzino B. Retraining cervical joint position sense: The effect of two exercise regimes. *J Orthop Res* 2007;25(3):404-412.
16. Watson DH, Trott PH. Cervical headache: an investigation of natural head posture and upper cervical flexor muscle performance. *Cephalalgia* 1993;13:272-284.
17. O'Leary S, Jull G, Kim M, Vicenzino B. Cranio-cervical flexor muscle impairment at maximal, moderate, and low loads is a feature of neck pain. *Man Ther* 2007;12(1):34-39.

18. Gandevia SC. Spinal and supraspinal factors in human muscle fatigue. *Physiol Rev* 2001;81:1725-1789.
19. Falla D, Jull G, Hodges PW. Patients with neck pain demonstrate reduced activation of the deep neck flexor muscles during performance of the craniocervical flexion test. *Spine* 2004;29(19):2108–2114.
20. Jull G, Barrett C, Magee R, Ho P. Further clinical clarification of the muscle dysfunction in cervical headache. *Cephalalgia* 1999;19(3):179-185.
21. Jull GA. Deep cervical flexor muscle dysfunction in whiplash. *Journal of Musculoskeletal Pain* 2000;8(1/2):143-154.
22. Jull G, Kristjansson E, Dall'Alba P. Impairment in the cervical flexors: a comparison of whiplash and insidious onset neck pain patients. *Man Ther* 2004;9(2):89-94.
23. Jull G, Amiri M, Bullock-Saxton J, Darnell R, Lander C. Cervical musculoskeletal impairment in frequent intermittent headache. Part 1: Subjects with single headaches. *Cephalalgia* 2007:In Press.
24. Chiu TT, Law E, Chiu TH. Performance of the craniocervical flexion test in subjects with and without chronic neck pain. *JOSPT* 2005;35:567-571.
25. Amiri M, Jull G, Bullock-Saxton J, Darnell R, Lander C. Cervical musculoskeletal impairment in frequent intermittent headache. Part 2: Subjects with multiple headaches. *Cephalalgia* 2007:In Press.
26. Cholewicki J, Panjabi MM, Khachatryan A. Stabilizing function of trunk flexor-extensor muscles around a neutral spine posture. *Spine* 1997;22(19):2207-2212.
27. Falla D, Jull G, Hodges PW. Feedforward activity of the cervical flexor muscles during voluntary arm movements is delayed in chronic neck pain. *Exp Brain Res* 2004;157:43-48.
28. Grimmer K. The relationship between cervical resting posture and neck pain. *Physiotherapy* 1996;82(1):45-51.
29. Hanten WP, Olson SL, Russell JL, Lucio RM, Campbell AH. Total head excursion and resting head posture: normal and patient comparisons. *Arch Phys Med Rehabil* 2000;81(1):62-66.
30. Haughe LJ, Fiebert IM, Roach KE. Relationship of forward head posture and cervical backward bending to neck pain. *J Manual Manipulative Ther* 1995;3(3):91-97.
31. Treleaven J, Jull G, Atkinson L. Cervical musculoskeletal dysfunction in post-concussional headache. *Cephalalgia* 1994;14(4):273-279.
32. Harms-Ringdahl K, Ekholm J, Schuldt K, Nemeth G, Arborelius UP. Load moments and myoelectric activity when the cervical spine is held in full flexion and extension. *Ergonomics* 1986;29(12):1539-1552.
33. Twomey L, Taylor J. Flexion creep deformation and hysteresis in the lumbar vertebral column. *Spine* 1982;7:116-122.
34. Sterling M, Jull G, Vicenzino B, Kenardy J, Darnell R. Development of motor dysfunction following whiplash injury. *Pain* 2003;103:65-73.
35. Jull G, Falla D, Treleaven J, Sterling M, O'Leary S. A therapeutic exercise approach for cervical disorders. In: Boyling JD, Jull G, editors. *Grieve's modern manual therapy: The vertebral column*. 3rd ed. United Kingdom: Elsevier; 2004.
36. Falla D, O'Leary S, Fagan A, Jull G. Recruitment of the deep cervical flexor muscles during a postural correction exercise performed in sitting. *Man Ther* 2007;12(2):139-143.