Abstract Title:	Neck retractions, cervical root decompression, and radicular pain.
Summary:	In a group of patients with neck and radicular pain a posture of sustained flexion caused a significant increase in peripheral pain and root compression as measured by H reflex amplitude. Repeated retractions caused a significant decrease in peripheral pain and decrease of nerve root compression.
Abstract Content:	STUDY DESIGN: Two-group repeated measures. OBJECTIVES: To evaluate the changes in the flexor carpi radialis H reflex after reading and neck retraction exercises and to correlate reflex changes with the intensity of radicular pain. BACKGROUND: Repeated neck retraction movements have been routinely prescribed for patients with neck pain. METHODS AND MEASURES: Ten nonimpaired subjects (mean age, 27 +/- 4 years) and 13 patients (mean age, 35 +/- 9 years) with C7 radiculopathy volunteered for the study. The flexor carpi radialis H reflex was elicited by electrical stimulation of the median nerve at the cubital fossa before and after 20 minutes of reading and after 20 repetitive neck retractions. Subjective intensity of the radicular pain was reported before and after each condition using an analog scale. RESULTS: For patients with radiculopathy, a repeated-measures analysis of variance showed a significant decrease in the H reflex amplitude (from 0.81 +/- 0.4 to 0.69 +/- 0.39 mV), an increase in radicular symptoms after reading (from 4.2 +/- 1.3 to 5.6 +/- 1.4 on the visual analog scale), an increase in the H reflex amplitude (from 0.69 +/- 0.39 to 1.01 +/- 0.49 mV), and a decrease in pain intensity (from 5.6 +/- 1.4 to 1.5 +/- 1.3) after repeated neck retractions. There was an association between cervical root compression (smaller H reflexes) and increased pain during reading and between cervical root decompression (larger H reflex) and reduced pain (r = -0.86 to -0.60). Exacerbation of symptoms was found with a reading posture. There were no significant changes in the H reflex amplitude in the nonimpaired group. No changes were found in reflex latency for either groups. CONCLUSIONS: Neck retractions appeared to alter H reflex amplitude. These exercises might promote cervical root decompression and reduce radicular pain in patients with C7 radiculopathy. The opposite effect (an exacerbation of symptoms) was found with the reading posture. Texas Woman's University, School of Physical Therapy, Houston 77030-2897, USA
Abstract Author:	Abdulwahab SS, Sabbahi M
Journal:	J Orth & Sports Phys Ther
Biblio:	Jan;30(1):4-9
Year Published:	2000
Category:	Cervical: Trials
Abstract Title:	A randomised clinical trial comparing general exercise, McKenzie treatment and a control group in patients with neck pain.
Summary:	77 patients with acute to chronic neck pain randomised to 1 of 3 treatment arms, 93% follow-up at 12 months. All groups significant improvements in pain and disability, no significant difference between groups. Trend towards greater improvements in McKenzie group compared to controls at certain times. Significant improvements in DRAM scores in McKenzie group only. Recurrence rates similar by 12 months, but additional healthcare usage much less in McKenzie group.
Abstract Author:	Kjellman G, Oberg B:
Journal:	J Rehabil Med
Biblio:	34:183-190
Year Published:	2002
Category:	Cervical: Trials
Abstract Title:	Effects of active head retraction with retraction/extension and occipital release on the pressure pain threshold of cervical and scapular trigger points.
-	One session of either intervention caused no significant changes in trigger point sensitivity.
Abstract Author:	Hanten WP, Barrett M, Gillespie-Plesko M, Jump KA, Olson SL
Journal:	Physio Theory & Pract
Biblio:	13.285-291
Year Published:	
Category:	Cervical: Trials
Abstract Title:	The association of the involvement of financial compensation with the outcome of cervicobrachial pain that is treated conservatively.
Summary:	Of 60 patients with neck and arm pain treated with the McKenzie approach those involved in financial compensation showed no improvement, whilst those that were not showed a significant improvement.

Abstract Author:	Schmidt I, Rechter L, Hansen VK, Therkelsen K, Rasmussen C
Journal:	Rheumatology
Biblio:	40: 552-554
Year Published:	2001
Category:	Cervical: Trials
Abstract Title:	A randomized controlled trial of exercise and manipulative therapy for cervicogenic headache.
Summary:	200 patients with cervical headaches randomised to manipulation, exercise, combined, or control group. Exercises consisted of craniocervical flexion endurance exercises (ie retraction), postural correction exercises, and isometric rotation exercises. At 12 months all 3 active treatments significantly better than control, combined treatment better, but not significantly.
Abstract Content:	STUDY DESIGN: A multicenter, randomized controlled trial with unblinded treatment and blinded outcome assessment was conducted. The treatment period was 6 weeks with follow-up assessment after treatment, then at 3, 6, and 12 months. OBJECTIVES: To determine the effectiveness of manipulative therapy and a low-load exercise program for cervicogenic headache when used alone and in combination, as compared with a control group. SUMMARY OF BACKGROUND DATA: Headaches arising from cervical musculoskeletal disorders are common. Conservative therapies are recommended as the first treatment of choice. Evidence for the effectiveness of manipulative therapy is inconclusive and available only for the short term. There is no evidence for exercise, and no study has investigated the effect of combined therapies for cervicogenic headache. METHODS: In this study, 200 participants who met the diagnostic criteria for cervicogenic headache were randomized into four groups: manipulative therapy group, exercise therapy group, combined therapy group, and a control group. The primary outcome was a change in headache frequency. Other outcomes included changes in headache intensity and duration, the Northwick Park Neck Pain Index, medication intake, and patient satisfaction. Physical outcomes included pain on neck movement, upper cervical joint tenderness, a craniocervical flexion muscle test, and a photographic measure of posture. RESULTS: There were no differences in headache-related and demographic characteristics between the groups at baseline. The loss to follow-up evaluation was 3.5%. At the 12-month follow-up assessment, both manipulative therapy and specific exercise had significantly reduced headache frequency and intensity, and the neck pain and effects were maintained (P < 0.05 for all). The combined therapies was not significantly superior to either therapy alone, but 10% more patients gained relief with the combination. Effect sizes were at least moderate and clinically relevant. CONCLUSION: Manipulative therapy and exercise
Abstract Author:	Jull G, Trott P, Potter H, Zito G, Niere K, Shirley D, Emberson J, Marschner I, Richardson C.
Journal:	Spine
Biblio:	Sep 1;27(17):1835-43
Year Published:	2002
Category:	Cervical: Trials