

NEWS AND NOTES

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Effectiveness of Physical Therapy for Patients with Neck Pain

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In a study by Wang, et al. in 2003, researchers attempted to determine the effectiveness of individualized physical therapy for patients with neck pain. The study included 57 patients with neck pain (30 patients in the treatment group and 27 patients in the control group). Patients attended physical therapy sessions 2-3 times a week for 4 weeks for an average of 10.9 visits.

For the treatment group, treatment began with a comprehensive evaluation by one evaluator. The patients were classified into appropriate categories according to assessment results. Each patient received individualized manual therapy and participated in a specific exercise program directed by the physi-

cal therapist who performed the evaluations.

The control group did not receive any treatment over the duration of this study.

Five outcome measures were used to assess results of the study. Active cervical range of motion was measured using the Cervical Range of Motion device. Pain intensity was measured with an 11-point numeric rating scale. Endurance was tested using the timed weighted overhead test and the timed capital flexion test. Each patient also gave a self-report of disability using the 11-point Patient Specific Functional Scale

(PSFS). The same tester, both pre- and post-treatment, administered all measurements.

The treatment group significantly improved in every outcome measure (see Table 1). The control group made no significant improvements.

The authors concluded that an individualized physical therapy approach using clinical decision-making, manual techniques, and exercise is beneficial for patients with neck pain.

Outcome Measure	Pre-Rx (Treatment)	Post-Rx (Treatment)	Pre-& Post-Rx (Control)
Cervical AROM	250°	320°	280°
Pain Intensity	5.5	2	5
Overhead Endurance	110 sec.	150 sec.	90 sec
Timed Capital Flexion	30 sec.	60 sec.	28 sec
PSFS	4.2	7.86	4.03 to 4.77

Table 1. Results Summary

Wang, W., Olson, S., Campbell, A., Hanten, W., & Gleeson, P. (2003). Effectiveness of physical therapy for patients with neck pain: An individualized approach using a clinical decision-making algorithm. *American Journal of Physical Medicine and Rehabilitation*, 82, 203-218.

Treatment of Neck Pain at Stover Physical Therapy

At Stover Physical Therapy we use a treatment approach known as Mechanical Diagnosis and Therapy (MDT) to treat neck pain and associated problems such as shoulder pain, headache, dizziness, arm pain, and hand numbness and tingling. Before administering any treatment we always complete a comprehensive history and mechanical evaluation of the cervical spine. We attempt to classify patients into one of three mechanical syndromes. These classifications help us derive a specific principle of treatment. Based on our evaluation, we develop an individualized treatment program that commonly includes directionally specific exercises,

manual therapy procedures, and advice for modifying daily functional activities.

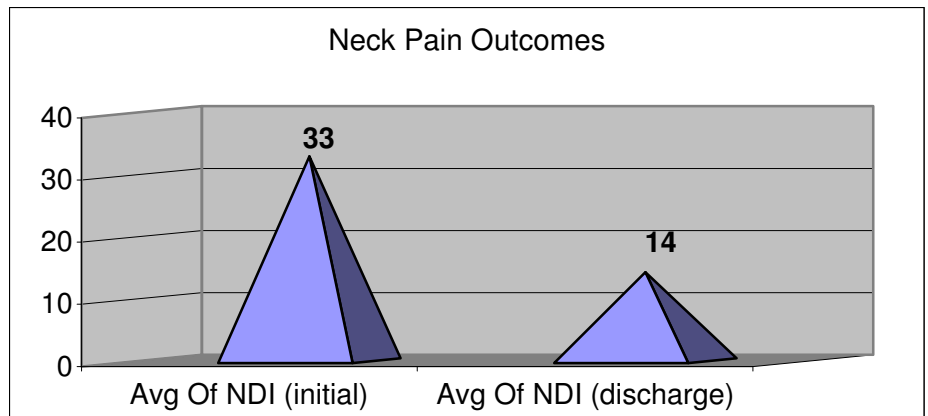
We use a validated health questionnaire called the Neck Disability Index (NDI) to monitor our outcomes. The NDI is an instrument specifically developed to assess pain intensity, and assess how neck pain affects activities of daily

living. NDI scores vary from 0% -100%, with the lower number representing less pain and disability.

Over the last several years we have compiled the NDI results of 139 patients with non specific neck pain .

These patients averaged 9 visits over a 4 week period.

See the graph below for the results.

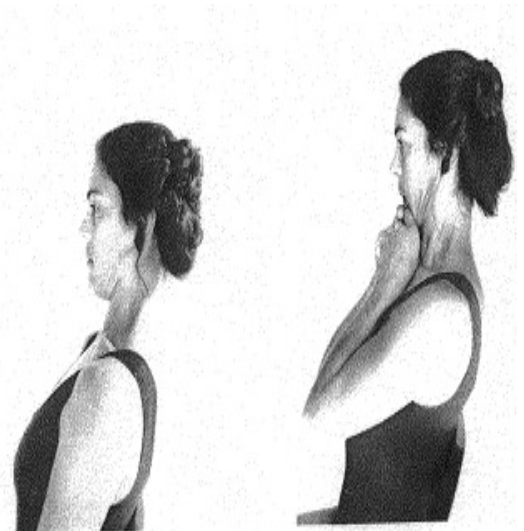


Stover PT Clinical Pearl

Cervical retraction is a useful exercise for many neck conditions. This movement is frequently used in MDT to treat mechanical neck pain. Cervical retraction is the combined movement of upper cervical flexion and lower cervical extension. It elongates posterior cervical musculature and, according to some studies, decreases nerve root compression, and improves static neck posture in sitting (Abdulwahab and Sabbahi, 2000, Jull and Falla 2007). We find that this movement done correctly and often helps improve posture, decrease pain, and improve mobility/function.

Abdulwahab, S.S., & Sabbahi, M. (2000). Neck retractions, cervical root decompression, and radicular pain. *Journal of Orthopaedic & Sports Physical Therapy*, 30, 4-12.

Falla, Jull, Russell, Vicenzino, Hodges (2007). Effect of Neck Exercise on Sitting Posture in Patients with Chronic Neck Pain. *Physical Therapy* Volume 87 no. 4, 408-417.



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