Neck Disability Index

Source: Vernon H, Mior S. The Neck Disability Index: a study of reliability and validity. J Manipulative Physiol Ther. 1991 Sep;14(7):409-15.

Neck disorders are a significant source of pain and activity limitation in workers and those involved in motor vehicle collisions. The Neck Disability Index (NDI) [1] is designed to measure neck-specific disability. The questionnaire has 10 items concerning pain and activities of daily living including personal care, lifting, reading, headaches, concentration, work status, driving, sleeping and recreation. The measure is designed to be given to the patient to complete, and can provide useful information for management and prognosis of those with neck pain.

Scoring and interpretation

Each item is scored out of five (with the no disability response given a score of 0) giving a total score for the questionnaire out of 50. Higher scores represent greater disability. The result can be expressed as a percentage (score out of 100) by doubling the total score.

The 'Clinical guidelines for best practice management of acute and chronic whiplash-associated disorders' [2] indicate that about 40% of patients with whiplash recover in less than four weeks, and that by six weeks about 50% have recovered. The guidelines recommend the use of the NDI to screen for risk factors and evaluate treatment effectiveness. An NDI score of >40/100 at initial assessment (first consultation following an injury) is associated with ongoing pain and disability after whiplash. This can alert a practitioner to the potential need for more regular review, or early referral to a specialized health provider such as a physiotherapist, chiropractor or psychologist. The guidelines indicate that 'recovery' is represented by an NDI score of less than 8/100, at which time treatment should be ceased.

References

1. Vernon H, Mior S. The Neck Disability Index: a study of reliability and validity. *J Manipulative Physiol Ther* 1991 Sep;14(7):409-15.

2. TRACsa Trauma Injury and Recovery. Clinical guidelines for best practice management of acute and chronic whiplash-associated disorders. Canberra: National Health and Medical Research Council; 2008.

Patient's Name_____ Number_____ Date_____

NECK DISABILITY INDEX

This questionnaire has been designed to give the doctor information as to how your neck pain has affected your ability to manage in everyday life. **Please answer every section and mark in each section only ONE box** which applies to you. We realize you may consider that two of the statements in any one section relate to you, but **please just mark the box which MOST CLOSELY describes your problem.**

Section 1 - Pain Intensity

☐ I have no pain at the moment.
☐ The pain is very mild at the moment.
☐ The pain is moderate at the moment.
☐ The pain is fairly severe at the moment.
☐ The pain is very severe at the moment.
☐ The pain is the worst imaginable at the moment.

Section 2 -- Personal Care (Washing, Dressing, etc.)

☐ I can look after myself normally without causing extra pain.
☐ I can look after myself normally but it causes extra pain.
☐ It is painful to look after myself and I am slow and careful.
☐ I need some help but manage most of my personal care.
☐ I need help every day in most aspects of self care.
☐ I do not get dressed, I wash with difficulty and stay in bed.

Section 3 – Lifting

☐ I can lift heavy weights without extra pain.
☐ I can lift heavy weights but it gives extra pain.
☐ Pain prevents me from lifting heavy weights off the floor, but I can manage if they are conveniently positioned, for example on a table.
☐ Pain prevents me from lifting heavy weights, but I can manage light to medium weights if they are conveniently positioned.
☐ I can lift very light weights.
☐ I cannot lift or carry anything at all.

Section 4 – Reading

☐ I can read as much as I want to with no pain in my neck.
☐ I can read as much as I want to with slight pain in my neck.
☐ I can read as much as I want with moderate pain.
☐ I can't read as much as I want because of moderate pain in my neck.
☐ I can hardly read at all because of severe pain in my neck.
☐ I cannot read at all.

Section 5-Headaches

☐ I have no headaches at all.
☐ I have slight headaches which come infrequently.
☐ I have slight headaches which come frequently.
☐ I have moderate headaches which come infrequently.
☐ I have severe headaches which come frequently.
☐ I have headaches almost all the time.

Scoring: Questions are scored on a vertical scale of 0-5. Total scores and multiply by 2. Divide by number of sections answered multiplied by 10. A score of 22% or more is considered a significant activities of daily living disability.
(Score___ x 2) / (____Sections x 10) = _____ %ADL_____

Section 6 – Concentration

☐ I can concentrate fully when I want to with no difficulty.
☐ I can concentrate fully when I want to with slight difficulty.
☐ I have a fair degree of difficulty in concentrating when I want to.
☐ I have a lot of difficulty in concentrating when I want to.
☐ I have a great deal of difficulty in concentrating when I want to.
☐ I cannot concentrate at all.

Section 7—Work

☐ I can do as much work as I want to.
☐ I can only do my usual work, but no more.
☐ I can do most of my usual work, but no more.
☐ I cannot do my usual work.
☐ I can hardly do any work at all.
☐ I can't do any work at all.

Section 8 – Driving

☐ I drive my car without any neck pain.
☐ I can drive my car as long as I want with slight pain in my neck.
☐ I can drive my car as long as I want with moderate pain in my neck.
☐ I can't drive my car as long as I want because of moderate pain in my neck.
☐ I can hardly drive my car at all because of severe pain in my neck.
☐ I can't drive my car at all.

Section 9 – Sleeping

☐ I have no trouble sleeping.
☐ My sleep is slightly disturbed (less than 1 hr. sleepless).
☐ My sleep is moderately disturbed (1-2 hrs. sleepless).
☐ My sleep is moderately disturbed (2-3 hrs. sleepless).
☐ My sleep is greatly disturbed (3-4 hrs. sleepless).
☐ My sleep is completely disturbed (5-7 hrs. sleepless).

Section 10 – Recreation

☐ I am able to engage in all my recreation activities with no neck pain at all.
☐ I am able to engage in all my recreation activities, with some pain in my neck.
☐ I am able to engage in most, but not all of my usual recreation activities because of pain in my neck.
☐ I am able to engage in a few of my usual recreation activities because of pain in my neck.
☐ I can hardly do any recreation activities because of pain in my neck.
☐ I can't do any recreation activities at all.

Comments_____
%ADL

Reference: Vernon, Mior. JMPT 1991; 14(7): 409-15