

Student's full name: _____

MODULE BIOMECHANICS OF SPINE

Didactic Unit C: HOW DO I ASSESS SPINE?

C.2. Which clinical scales exist to assess spine?

CLASS ACTIVITY: PATIENT'S FILE

Jennifer. Female, 35

No past medial history of interest



HISTORY OF PRESENT ILLNESS

Two months ago, the patient had a car accident (posterior collision by another car while commuting to work). Occurs with sudden abrupt forward and backward movement of the head and neck with hyperextension.

After ruling out any severe damage, she has been diagnosed with Whiplash Associated disorder. She has undergone 20 sessions of rehabilitation treatment.

Currently she refers **persistence of mild cervical pain** at both trapezoids, with a mechanical rhythm and without other accompanying symptoms. It appears with movement, mainly with head extension and rotations.

She refers **pain of 3 at rest and of 7 during exacerbations**, according to the visual analogue scale (VAS : from 1 to 10).

PHYSICAL EXAMINATION



- Mild cervical stiffness with a slight limitation of the cervical extension at the end of range. Both rotations with an active limitation of 20° in the context of pain referred. Slowness of motion during active range of movement assessment.

-Tenderness at medium fibers of right trapezius, with a mild contracture at this level.

- No motor or sensory deficits

- Spurling and Jackson tests negative.

QUEBECK TASK FORCE GRADE: _____

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NECK DISABILITY INDEX SCALE (NDI) RESULTS

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 can 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 lifting heavy weights off the floor, but I can manage if they are conveniently placed, 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 only lift very light weights
- I cannot lift or carry anything

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 in my neck
- 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 moderate headaches, which come infrequently
- I have moderate headaches, which come frequently
- I have severe headaches, which come frequently
- I have headaches almost all the time



Section 6: Concentration

- I can concentrate fully when I want to with no difficulty
- X 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
- X 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 can 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
- X I can't drive my car as long as I want because of moderate pain in my neck
- I can hardly drive 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)
- X My sleep is mildly disturbed (1-2 hrs sleepless)
- My sleep is moderately disturbed (2-3 hrs sleepless)
- My sleep is greatly disturbed (3-5 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
- X 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

TOTAL (RAW) SCORE: _____

FINAL SCORE in %: _____

LEVEL OF DISABILITY according to %

Final Score= raw score/50 Transform to percentage score x 100 = %points

Scoring: For each section (1 to 10) the total possible score is 5: if the first statement is marked the section score = 0, if the last statement is marked it = 5.

That is to say, for each section, first answer=0 points /second=1/ and so on.

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