Development of innovative training solutions in the field of functional evaluation aimed at updating of the curricula of health sciences schools

MODULE BIOMECHANICS OF SPINE

Didactic Unit C: HOW DO I ASSESS SPINE?

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

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Clinical Scales to assess spine
PREVIOUS CONCEPTS

- Clinical scales are a source of clinical information obtained through standardized questionnaires

- The information obtained from these questionnaires is useful to monitor the evolution and progress of a patient, establish population references or assess the effectiveness of a specific treatment.

- They are relatively easy to use, do not require any equipment and do not have *floor effect**

Floor effect* : a methodology has floor effect when it can only be used from a mínimum level of performance.
On the contrary, clinical scales can be used to evaluate any kind of impairment, no matter the severity of it.

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Clinical Scales to assess spine
PREVIOUS CONCEPTS

SCALES TO ASSESS CERVICAL SPINE

- **NECK DISABILITY INDEX (NDI)**
- NECK PAIN AND DISABILITY SCALE (NPDA)
- NORTHWICK PARK NECK PAIN QUESTIONNAIRE (NPQ)
- *QUEBEC TASK FORCE FOR WHIPLASH-ASSOCIATED DISORDER (WAD)****

*** Classification system, not a questionnaire

SCALES TO ASSESS LUMBAR SPINE

- **OSWESTRY DISABILITY INDEX (ODI)**
- ROLAND MORRIS LOW BACK PAIN AND DISABILITY QUESTIONNAIRE (RMQ)

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Clinical Scales to assess spine
CLASS ACTIVITY

- For the first task you will gather in groups.
- You will work with the information provided in this video and try to **answer the question proposed.**
- You also count on a patient's file sheet which you can look at, with the clinical information of interest for this case.

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Clinical Scales to assess spine
CLASS ACTIVITY

Discuss with your group (5'):

- According to the Quebec Task Force Classification, what grade will have our patient?

Write your answer on your patient's file sheet

Remember……

GRADE I	**No complaints about the neck. No physical sign(s).**
GRADE II	**Neck complaint of pain, stiffness or tenderness only. No physical sign(s).**
GRADE III	**Neck complaint AND musculoskeletal sign(s). Musculoskeletal signs include decreased range of motion and point tenderness.**
GRADE IV	**Neck complaint AND neurological sign(s). Neurological signs include decreased or absence of tendon reflexes, weakness and sensory deficits.**
GRADE V	**Neck complaint AND fracture or dislocation**

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Clinical Scales to assess spine
CLASS ACTIVITY

Work individually (10'):

- Calculate the **final percentage** obtained with the NDI with the raw punctuation got. You have to **look at the files of your patient** to do this.
- What level of disability does the patient have according to the NDI?

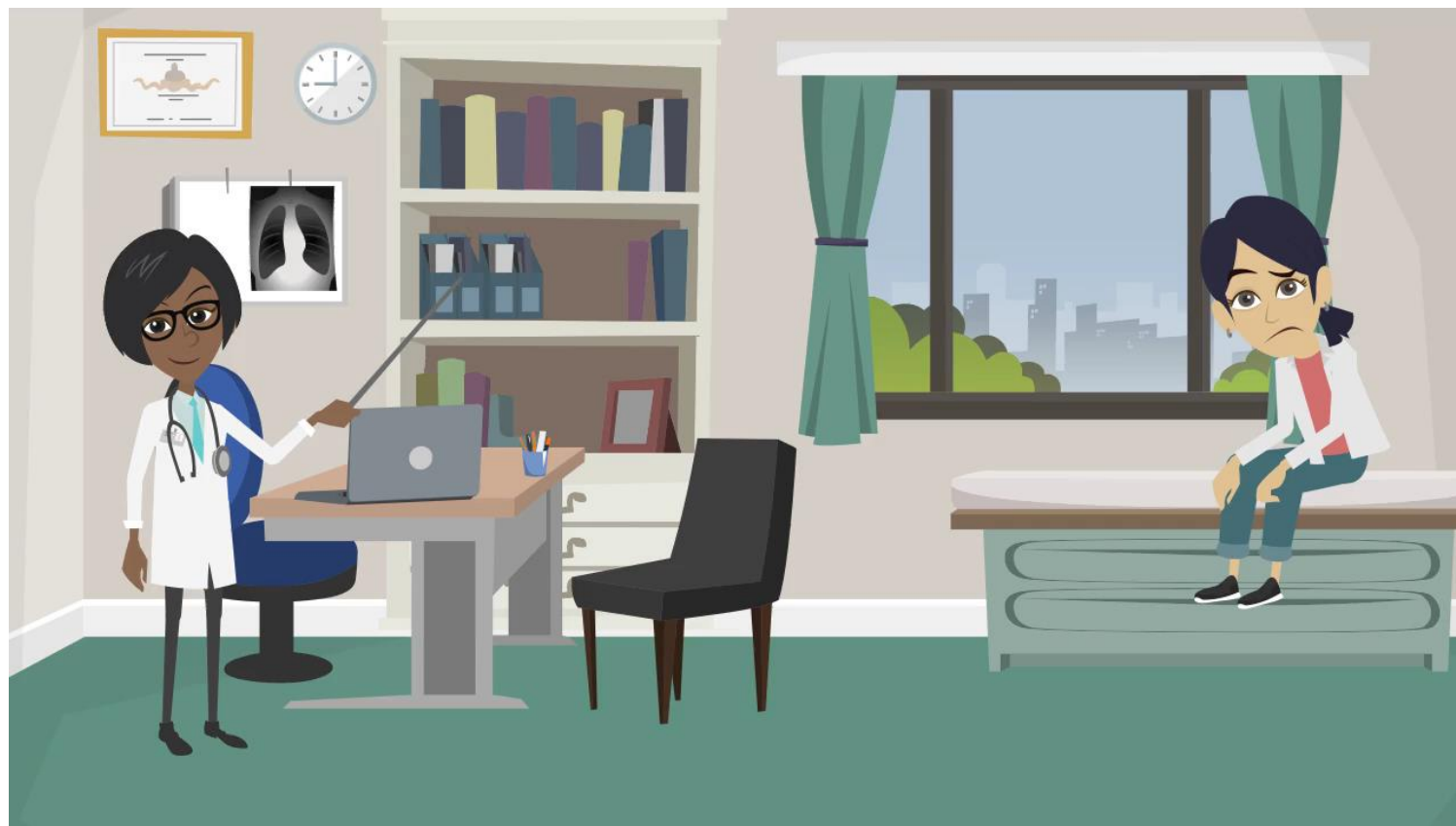*Write your answers on your patient's file sheet*

Remember……

NECK DISABILITY INDEX (NDI) CLASSIFICATION		
	0-4 points (0-8%)	**no disability**
	5-14 points (10 – 28%)	**mild disability**
	15-24 points (30-48%)	**moderate disability**
	25-34 points (50- 64%)	**severe disability**
	35-50 points (70-100%)	**complete disability**

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Clinical Scales to assess spine
CLASS ACTIVITY: ANSWERS

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Clinical Scales to assess spine
CONCLUSIONS

- *Clinical scales are a valid and useful tool to evaluate the impact of pain or other type of disorders over the function of the subject.*

- *Some of the most widespread scales to evaluate disability in the context of neck pain or neck disorders in general are the Neck Disability Index (NDI), the Neck Pain and Disability Scale (NPDA) and the Northwick Park Neck Pain Questionnaire (NPQ).*

- *For the evaluation of disability in lumbar spine, the most commonly used scales are the Oswestry Disability Index (ODI) and the Roland Morris Low Back Pain and Disability Questionnaire (RMQ).*