Erasmus+

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 A

Topic: Biomechanics of the normal spine

Self-Questionnaire

Politechnika Śląska

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Self-questionnaire:

- Self-questionnaire aimed to test the knowledge acquired.
- It will include 5 objective questions with 4 answer options.
- Mark in bold the correct answer.

Type of questions:

- **Drag and drop into text:** Students select missing words or phrases and add them to text by dragging boxes to the correct location. Items may be grouped and used more than once.
- **Drag and drop markers:** Students drop markers onto a selected area on a background image. Unlike the drag and drop onto image question type, the are no predefined areas on the underlying that are visible to the student.
- **Drag and drop onto image:** Students make selections by dragging text, images or both to predefined boxes on a background image. Items may be grouped.
- **Matching:** A list of sub-questions is provided, along with a list of answers. The respondent must “match” the correct answers with each question.
- **Multichoice:** With the Multichoice question type you can create single-answer and multiple-answer questions, include pictures, sound or the other media in the question and/or answer options and weight individual answers.
- **Select missing words:** Students select a missing word or phrase from a dropdown menu. Items may be grouped and used more than once.
- **True/False:** In response to a question (that may include an image), the respondent selects from two options: True or False.

Question 1

With respect to the Functional Spine Unit (FSU), is true:

□ A Each spinal segment (cervical, thoracic and lumbar) is considered an independent FSU.

□ B **Consists of two adjacent vertebrae and the interconnecting soft tissue, devoid of musculature.**

□ C It refers to how a vertebra moves in space along with the soft tissue that rests on it.

□ D Consists of two adjacent vertebrae and the interconnecting soft tissue, included the musculature.

Question 2

With respect to the Atlato-occipital joint, is false:

□ A Its primary motions are flexion and extension or nodding movements.

□ B The movements in this joint ocurrs due the rolling and gliding of the occiputal condyles on the concave surface of the Atlas socket.

□ C **In extension, the condyles rolling forwards and sliding backward across the anterior walls of their sockets.**

□ D In flexion, the condyles rolling forwards and sliding backward across the anterior walls of their sockets.

Question 3

The stabilization of the atlantodental joint depends mainly on:

□ A The anterior arch of the Atlas it self.

□ B The lateral atlanto-axial joints.

□ C The adjacent stabilizing musculature.

□ D **Transverse, alar and apical ligaments.**

Question 4

The lumbar spine receives a greater load than the upper spinal segments. One of the characteristics to bear that load is:

□ A The lumbar intervertebral discs are at least twice as high posteriorly than anteriorly.

□ B Maintains a lumbar lordosis of 30°.

□ C **The lumbar vertebral body is comparatively large with their size increasing toward the sacrum.**

□ D The lumbar facet joints have a transversal orientation of 90°.

Question 5

During the sitting position, the lumbar intradiscal pressure increases with:

□ A The use of armrests.

□ B The posterior inclination of the backrest.

□ C **Sit on a stool (surface without backrest or armrest).**

□ D None alternative is correct.

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