Student's full name:

_____

MODULE BIOMECHANICS OF SPINE

Didactic Unit B: Biomechanical alterations of the spine

Activity 1

Select missing words: Students select a missing word or concept from a dropdown menu. Items may be grouped and used more than once.

1) According to the Anderson and Montesano (1988) classification of fractures of the occipital condyles, [ ] fracture results from axial loading.

Tipe I Tipe II Tipe III

2) With respect to the Atlantoocipital dislocation, the main mechanism of injury is the [ ] force on the cervical spine.

Compression Distraction Flexion

3) The application of axial loading and flexion of the head causes a fracture of the Atlas vertebra, specifically on the [ ] .

Lateral mass Anterior arch Posterior arch

4) The Atlantodental interval is the horizontal distance between the dens of the axis and the [ ] , used in the diagnosis of injuries of the atlas and axis.

Lateral mass Anterior arch Posterior arch

5) In odontoid fractures, the stability of the C1-C2 complex is altered by about 40%. However, when the odontoid injury involves the [ ], stability increases and the injury may require surgery.

Alar and transversal Flavum ligament Intertransverse ligament

6) Axial loading of the cervical spine with the neck in neutral position will cause a compression fracture or a [ ] fracture of the vertebral body.

Stable Burst Unstable

7) One type of injury to the lower cervical spine is the [ ] fracture, and occur when a combination of flexion and axial compression forces acts on the spinal column simultaneously.

Teardrop Burst Jefferson

8) The kinematic sequence of the whiplash-associated disorder starts with flexural deformation of the neck and the lordosis [ ].

Changes to kyphosis Become straight Increase

9) Seat-belt injury are typical lesions of the thoracolumbar junction as a result of a hyperflexion centered in said area that at the same time causes a [ ] force from the most posterior area of the vertebra.

Shears Compression Distraction

10) When spinal fusion is required in the lumbar spine, the fused levels that most limit extension and lateral flexion movements are [ ].

L1-L2/L2-L3 L2-L3/L3-L4 L4-L5/L5-S1