

Assessing Level of Consciousness

Virtual Simulation

Case Study: Head Injury

1. *What cranial nerves were assessed initially by the nurse and how were they assessed? Identify the nerve and how to complete the assessment.*

1. Cranial nerve 3 influences the size of the pupil – this was assessed with a flashlight to see how they reacted to light.
2. Cranial nerve 7 influences the movement of the muscles in the face- this was assessed by the patient smiling, frowning, and blowing into cheeks.
3. The radial nerve is responsible for sending signals from your brain to your arms, lower limbs etc. – this was assessed by the patient squeezing fingers and pushing on nurses' hands.

In addition to the Motor Function

2. *If Mrs. Patterson exhibits the following symptoms: hypoxia, hypotension, and tachycardia. Please explain why she is having these symptoms.*

The patient could be experiencing these symptoms because she is not protecting her airway when she was experiencing decorticate posturing. This posturing is putting pressure on the cortex of the brain. The cortex consists of four lobes: frontal, parietal, temporal and occipital lobes. Pressure on this cortex can affect the hypothalamus which is located at the center of the brain, that controls BP and heart rate.

3. *How could the injuries/symptoms (hypoxia, hypotension, tachycardia) affect the neurological condition?*

These injuries or symptoms can result in an anoxic brain injury for the patient as it isn't allowing enough oxygenated blood to reach the brain.

4. *Priority decision: What are the **priority nursing interventions** should the nurse implement at the end of the simulation?*

Priority nursing interventions are to protect the patient's airway and contact RT and a doctor. We will also need to make sure there is IV access in case life saving measures are needed.