Cerebellar Assessment

A cerebellar assessment consists of multiple tests for the patient in coordination. The examiner instructs the patient to perform a rapid alternating movement (RAM) by observing the patient's ability to pat their knees with both hands using both the palmar and dorsal surface of their hands in an alternating and expedient manner. Next, the patient is instructed to touch their thumb to each finger of the same hand as quickly and smoothly as possible. Repeat this process in reverse (e.g. start with thumb to pinky finger instead of pointer finger). Then, with the patient facing the examiner, a finger-to-nose test is performed by instructing the patient to touch the examiner's finger by extending their hand, then immediately touching their nose and repeating the process. A heel-to-shin test is performed with the patient supine on a stable surface and instructed to touch the heel of one foot to the opposite shin with a smooth movement down to their ankle. Repeat with the opposite side. Finally, and concluding the cerebellar assessment, is when the examiner observes the patient's gait assessing for smooth, rhythmic and balanced movement. The patient is instructed to walk about 10-20 feet, turn around and return to the starting point. Any difficulty while performing the tests or alterations in smoothness or speed of performance may indicate an underlying pathologic process.

PLAY PICMONIC

Coordination

Observe Rapid Alternating Movements (RAM)

Ram with Rapid Alternating Movements

The nurse assesses RAM by observing the patient "pat" their knees with both hands. Instruct the patient to begin by patting with the palm of both hands, then immediately turning over the hand to pat with the dorsal surface of both hands. Instruct to repeat this motion as fast as the patient can perform, and observe for a quick, rhythmic pace. Look for difficulty in performing this function, or alterations in smoothness or speed.

Touch Thumb to Each Finger

Touching Thumb to Each Finger

The nurse instructs the patient to touch their thumb to each finger of their same hand, much like performing a pinching action. After performing one rotation, the nurse instructs the patient to perform this action in reverse. Any difficulty in performance or alterations in smoothness or speed may indicate an underlying pathologic process.

Finger-Nose-Finger Test

Touching Nose and Finger

With the patient facing the nurse, the examiner holds up one finger and instructs the patient to touch the finger. Immediately after touching fingers, the patient then is instructed to touch their nose and repeat the motion. After a few rotations, the nurse moves their finger to another location in the patient's sight. Watch for challenges with performance or alterations in smoothness or speed.

Heel-to-Shin Test

Heel on Shin

With the patient in a supine position on a stable surface, the nurse instructs the patient to place the heel of one foot on the opposite leg's shin. Then, the nurse instructs the patient to move their heel down the length of the shin to the ankle. Repeat this process with the opposite side.

Observe Gait

Gate

With the patient standing and 10-20 feet of open area, the nurse instructs the patient to walk the length of the area, turn around and return to the starting point. The patient's gait is assessed for smooth, rhythmic, and balanced movement. Observe for opposing arm swing which is coordinated, and a smooth transition when turning around. This test is often performed at the end of the assessment to minimize patient position changes. Difficulty in performance may indicate an underlying pathologic process.