

Cervical Joint Position Error Test

Instructions and Results Interpretation

INSTRUCTIONS

- Patient sits 90cm (2.95') away from target with eyes closed and head in neutral position
- Place SenMoCOR™ Laser on patient's head and adjust laser to the center of target
- Patient rotates head in one direction through full ROM and returns to neutral
- Record laser's ending position on target
- Reposition laser to center of target with patient's eyes still closed
- Repeat for 3-6 trials
- Log distances (cm) on chart and calculate average distance
- Erase marks on target and repeat for each direction

AVERAGE DISTANCE =
$$(\text{sum of trials})/(\text{number of trials})$$

INTERPRETATION OF RESULTS

- The accuracy of the test results are dependent on the starting position of 90cm (2.95')
- Distances from center (measured in cm) represent degrees of error
- Asymptomatic adults demonstrate less than 7.1cm (4.5°) of error from starting position
- Greater than 7.1cm (4.5°) of error should be considered significant or abnormal
- Patients need not exceed the threshold in every movement direction for findings to be considered "positive"; consider whether the findings correlate with direction-specific impairments

PASS/FAIL THRESHOLD
Mean score of $>7.1\text{cm (4.5°)}$
indicates abnormal JPE

	Left Rotation Error (cm)	Right Rotation Error (cm)	Flexion Error (cm)	Extension Error (cm)
Trial 1				
Trial 2				
Trial 3				
Trial 4				
Trial 5				
Trial 6				
Average distance (sum of trials)/(# of trials)				