

PTA 204L PT Interventions – Neurological Dysfunctions

Terminology for Neuromuscular Conditions

Key terms for understanding descriptions of neuromuscular conditions are listed below. They are used throughout your text resources and in medical records. Refer to this list during lecture presentations and course reading in order to differentiate between signs and symptoms of neurological and neuromuscular conditions

Your reference content for terminology is the National Institutes of Health On-Line Medical Dictionary: <http://www.nlm.nih.gov/medlineplus/mplusdictionary.html>. Use the dictionary to help reinforce your ability to recall these words and their definitions

Terms associated with impairments and dysfunction of the neuromuscular system

1. Akinesia = inability to voluntarily initiate movement
2. Allodynia = pain from non-noxious stimulus (e.g., touch)
3. Analgesia = loss of pain/sensitivity
4. Astereognosis = inability to recognize the form and shape of objects by touch
5. Areflexia = loss of spinal reflexes
6. Arousal = readiness of the human system for activity
7. Aphasia = inability to produce functional (expressive) or integrate (receptive) speech
8. Apraxia = inability to perform skilled purposeful movements
9. Ataxia = lack of coordination
10. Attention = selective awareness of the environment or responsiveness to a stimulus or task without being distracted by other stimuli
11. Atopognosia = Inability to localize where a sensation is coming from
12. Athetosis = slow, involuntary, writhing, twisting movement
13. Balance = all forces acting on a body so that the center of mass is within the base of support
14. Barognosis = ability to perceive differences in weight through use of the cutaneous and muscular senses.
15. Bradykinesia = decreased amplitude and velocity of movement; slowed movements
16. Causalgia = painful burning sensation
17. Chorea = involuntary, rapid, irregular and jerky movements
18. Clonus = series of involuntary muscle contraction in response to a stretch
19. Cognition = process of knowing, includes awareness and judgment
20. Dementia = broad based memory impairment
21. Dermatome = skin area of sensation supplied by one dorsal root
22. Diplopia = double vision
23. Dysdiadochokinesia – inability to perform rapid alternating movement
24. Dysarthria = impairment of speech articulation (speech errors in volume, pitch, quality)
25. Dysesthesia = impairment of sensation where touch is perceived as pain

26. Dyskinesia = overactivity of muscles
27. Dysmetria = impairment judging distance or range of a movement
28. Dysphagia = impairment of strength and coordination of chewing and swallowing
29. Dyssynergia = muscle incoordination
30. Fasciculations = small, local, involuntary contraction
31. Festinating = shuffling pattern
32. Flaccidity = absence of strength, muscular activation
33. Graphesthesia = ability to identify alphabetic letters “drawn” on skin through perception of touch
34. Hemianopsia = loss of half of the visual field
35. Hemiparesis = weakness on one side of the body/limb
36. Hypalgesia = decreased sensitivity to pain
37. Hyperalgesia = increased sensitivity to sensory stimuli
38. Hyperreflexia = exaggerated responses of spinal reflexes
39. Hypertonia = increase in muscle tone
40. Hypokinesia = reduction of movement
41. Hypotonia = decrease in muscle tone
42. Incomplete = partial innervations remains distal to spinal cord lesion
43. Limits of stability (LOS) = maximum distance an individual is willing to lean in any direction without LOB or changing the BOS
44. Neglect = inattention to or lack of awareness of one side
45. Neuralgia = pain associated with nerve inflammation
46. Neuropathic = result of nervous system/tissue pathology
47. Nystagmus = rhythmic, quick alternating movements of the eyes
48. Quadriplegia = weakness in all four extremities
49. Reflex = involuntary, predictable, specific response to a stimulus
50. Spasticity = hypertonic resistance to passive stretch
51. Somatosensory = sensation received from the skin and neuromuscular system
52. Stereognosis = ability to identify common objects (shape and form) through touch
53. Orientation = awareness of time, person, place
54. Paraplegia = weakness in the lower part of the trunk or legs
55. Parasthesia = abnormal sensation (numbness, prickling, etc) without apparent cause
56. Paresis = weakness
57. Posture = the control of relative position of parts by skeletal muscles with respect to each other and gravity
58. Proprioception= joint position sense
59. Thermanalgesia = inability to perceive heat
60. Thermanesthesia = inability to perceive hot/cold
61. Tremor = involuntary oscillating contraction from opposing muscle groups
62. Vegetative = No conscious interaction; reflexive; sleep-wake cycles
63. Vertigo = sensation of dizziness

Definition of Coordination

1. muscle activity during voluntary movement
2. muscle groups working together to perform a task (timing, accuracy, sequence) = synergy
3. level of skill and efficiency
4. start, control and stop according to activity/environment demand