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](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. **Diploplia** = 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. Graphesthesias = 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