

بسم الله الرحمن الرحيم

اللهم إغفر لمن جمع هذه المعلومات و أعان إخوانه و جميع المسلمين

أضع بين يديك أخي هذا العمل و هو عبارة عن ملخص مركز جداً و أنصحك أن تراجع قبل إمتحانك بفترة كافية

و فقتنا الله و إياكم

وصلى الله و سلم على رسوله الكريم

Grading of stretch reflexes upon tapping muscle tendon

Grade	Response	Significance
0	no response	always abnormal
1+	slight but definitely present response	may or may not be normal
2+	brisk response	normal
3+	very brisk response	may or may not be normal
4+	clonus	always abnormal

Stretch reflexes

- Biceps reflex C5/C6
- Brachioradialis reflex C6
- Patellar reflex L4-L2 (knee-jerk)
- Ankle jerk reflex-Achilles S1/S2
- Abdominal reflex
 - upper T8-T10
 - lower T10- T12
- Triceps reflex C7/C8
- Extensor digitorum reflex C6/C7
- Hamstrings reflex L5-S1
- Plantar reflex L5-S2

Repetitive stimulation of a skeletal muscle fiber will cause an increase in contractile strength because repetitive stimulation causes an increase in

- a. **The duration of cross-bridge cycling**
- b. The concentration of calcium in the myoplasm
- c. The magnitude of the end-plate potential
- d. The number of muscle myofibrils generating tension
- e. The velocity of muscle contraction

During a normal voluntary movement

- a. Large muscle fibers are recruited before small muscle fibers
- b. Fast muscle fibers are recruited before slow muscle fibers
- c. **Weak muscle fibers are recruited before strong muscle fibers**
- d. Poorly perfused muscle fibers are recruited before richly perfused muscle fibers
- e. Anaerobic fibers are recruited before aerobic fibers

Tapping the patella tendon elicits a reflex contraction of the quadriceps muscle. During the contraction of the quadriceps muscle,

- a. **The Ib afferents from the Golgi tendon organ increase their rate of firing**
- b. The Ia afferents from the muscle spindle increase their rate of firing
- c. The alpha motoneurons innervating the extrafusal muscle fibers decrease their rate of firing
- d. The gamma motoneurons innervating the intrafusal muscle fibers increase their rate of firing
- e. The alpha motoneurons to the antagonistic muscles increase their rate of firing

You are treating a 54 year-old woman for degenerative arthritis of the left knee. Her medical record indicates that she is on **estrogen replacement therapy**. In this case, you should consider that this patient might be more susceptible to:

- A. coronary artery disease
- B. osteoporosis

87. A treatment plan for a patient diagnosed with benign paroxysmal positional vertigo (BPPV) would most likely emphasize:
- A. gaze stability exercises using horizontal head rotation
 - B. canalith repositioning treatment
 - C. postural stability exercises using a Swiss ball
 - D. vestibular feedback to facilitate normal movements

87. B

88. Three days following a cerebral vascular accident, a patient is supine in bed. It would be best to position the upper extremity so that the:
- A. scapula is protracted and upwardly rotated and the shoulder is abducted and externally rotated
 - B. scapula is protracted and upwardly rotated and the shoulder is abducted and internally rotated
 - C. scapula is retracted and downwardly rotated and the shoulder is adducted and internally rotated
 - D. scapula is retracted and downwardly rotated and the shoulder is abducted and externally rotated

88. A

107. Damage as a result of Salter-Harris type IV supracondylar humeral epiphyseal fracture in a young athlete will most likely result in:
- A. refracture at a future time
 - B. nonunion
 - C. arrested growth
 - D. severing of the radial nerve

107. C

108. If the patient is placed in a supine position with the head flat, postural drainage is optimal for the:
- A. apical segments of the upper lobes
 - B. posterior segments of the upper lobes
 - C. anterior segments of the upper lobes
 - D. lingular segments of the left upper lobes

108. C