Neurology Quiz

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ANSWER KEY

Directions: Edit the following sentences based on your understanding of **§14.11**, Neurology of the *AMA Manual of Style*.

1. Cranial nerves 3, 5, 6, and 7 were most commonly affected in the patients with cranial neuropathy.

ANSWER: Cranial nerves III, V, VI, and VII were most commonly affected in the patients with cranial neuropathy.

Editor's Note: Use roman numerals or English names when designating cranial (**§14.11.1.1**, Cranial Nerves).

2. Bone mineral density of the lumbar spine was defined as the mean bone mineral density of vertebrae L1-L4.

ANSWER: Bone mineral density of the lumbar spine was defined as the mean bone mineral density of vertebrae L1 through L4.

Editor's Note: Ranges of vertebrae are expressed as, for example, L1 through L4 or first through fourth vertebrae; use letters for both the first and last vertebrae in the indicated range (**§14.11.1.2**, Vertebrae, Spinal Nerves, Spinal Levels, Dermatomes, and Somites).

3. When exposure of only the L2-L3 disk space was needed, a right paramedian incision was performed.

ANSWER: When exposure of only the L2-3 disk space was needed, a right paramedian incision was performed.

Editor's Note: Hyphens are used for intervertebral spaces (including neural foramina) and intervertebral disks; use letter for only the first vertebra (**§14.11.1.2**, Vertebrae, Spinal Nerves, Spinal Levels, Dermatomes, and Somites).

4. An otherwise healthy, 57-year-old man underwent bilateral laminectomy and L4-5 discectomy for spinal stenosis and degenerative intervertebral disk disease.

ANSWER: An otherwise healthy, 57-year-old man underwent bilateral laminectomy and L4-5 diskectomy for spinal stenosis and degenerative intervertebral disk disease.

Editor's Note: L4-5 diskectomy is correct usage. Terminologia Anatomica uses disc, not disk (**§14.11.1.2**, Vertebrae, Spinal Nerves, Spinal Levels, Dermatomes, and Somites).

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5. The study prospectively compared surgical approaches for L4 to L5 fusion.

ANSWER: The study prospectively compared surgical approaches for L4-L5 fusion.

Editor's Note: Ranges of vertebrae when used as modifiers have one or more hyphens (**§14.11.1.2,** Vertebrae, Spinal Nerves, Spinal Levels, Dermatomes, and Somites).

6. Horner syndrome is associated with a proximal injury (usually a nerve root avulsion) to the C8 vertebra.

ANSWER: Horner syndrome is associated with a proximal injury (usually a nerve root avulsion) to the C8 spinal nerve.

Editor's Note: Spinal nerves C1 through C7 are named for the vertebrae above which they emerge, while T1 through S5 are named for the vertebrae below which they emerge. Spinal nerve C8 emerges below vertebra C7; there is no C8 vertebra (**§14.11.1.2**, Vertebrae, Spinal Nerves, Spinal Levels, Dermatomes, and Somites).

7. A high temporal resolution is crucial for the study of an emerging property of brain activity, namely, the spontaneous and event-related oscillatory activity at different frequencies ranging from 2 to 4 Hz (δ), 4 to 8 Hz (θ), 8 to 13 Hz (α), 13 to 30 Hz (β), and greater than 30 Hz (γ).

ANSWER: A high temporal resolution is crucial for the study of an emerging property of brain activity, namely, the spontaneous and event-related oscillatory activity at different frequencies ranging from 2 to 4 Hz (delta), 4 to 8 Hz (theta), 8 to 13 Hz (alpha), 13 to 30 Hz (beta), and greater than 30 Hz (gamma).

Editor's Note: Descriptions of EEG potentials include many qualitative terms for waveforms and frequencies; Greek letters are spelled out in these terms (**§14.11.2**, Electroencephalographic Terms).

8. The visual evoked potentials were analyzed using linear regression modeling applied to the N-80 to P-100 amplitude.

ANSWER: The visual evoked potentials were analyzed using linear regression modeling applied to the N80 to P100 amplitude.

Editor's Note: Waveforms recorded in evoked potential testing are identified with P for positive or N for negative plus an arabic number indicating milliseconds between stimulus and response in neurologically normal adults (**§14.11.2**, Electroencephalographic Terms).

9. We compared the latencies of the brainstem auditory evoked potential waves 1, 3, and 5; the 1-3, 3-5, and 1-5 interpeak intervals; the interaural latency difference (wave 5); and the 5/1 amplitude ratio between the 2 groups.

ANSWER: We compared the latencies of the brainstem auditory evoked potential waves I, III, and V; the I-III, III-V, and I-V interpeak intervals; the interaural latency difference (wave V); and the V/I amplitude ratio between the 2 groups.

Editor's Note: Waveforms recorded in evoked potential testing are identified with P for positive or N for negative plus an arabic number indicating milliseconds between stimulus and response in neurologically normal adults; however, other waves, eg, in brainstem auditory evoke potential, are designated with roman numerals (with hyphens in modifiers) (**§14.11.2**, Electroencephalographic Terms).

10. The total duration of each sleep stage (stages I-IV) was expressed in minutes and a percentage of the sleep period, and slow-wave sleep was defined as the sum of stages III and IV.

ANSWER: The total duration of each sleep stage (stages 1-4) was expressed in minutes and a percentage of the sleep period, and slow-wave sleep was defined as the sum of stages 3 and 4.

Editor's Note: Sleep stages are designated with Arabic numerals (**§14.11.4**, Polysomnography and Sleep Stages).

11. The beneficial effect of antidepressant interventions has been proposed to depend on suppression of REM sleep or inhibition of electroencephalographic slow-wave activity in NREM sleep.

ANSWER: The beneficial effect of antidepressant interventions has been proposed to depend on suppression of rapid-eye-movement sleep (REM sleep) or inhibition of electroencephalographic slow-wave activity in non–rapid-eye-movement (non-REM) sleep (NREM sleep).

Editor's Note: REM sleep and NREM sleep should be expanded at first mention as shown above (**§14.11.4**, Polysomnography and Sleep Stages).

12. Although 5-hydroxytryptamine (5-HT) has been implicated in the pathophysiology of depression, the precise nature of alterations in the 5-HT system that underlie depressive symptoms still remains elusive; 5-HT acts on at least 14 subtypes of 5-HT receptors (5-HT1 to 5-HT7 subfamilies), and, of these, 5-HT2 receptors have been the most studied in suicide completers with or without a history of depression and in patients with depression who died of natural causes.

ANSWER: Although serotonin (5-HT) has been implicated in the pathophysiology of depression, the precise nature of alterations in the 5-HT system that underlie depressive symptoms still remains elusive; 5-HT acts on at least 14 subtypes of 5-HT receptors (5-HT_1 to 5-HT_7 subfamilies), and, of these, 5-HT_2 receptors have been the most studied in suicide completers with or without a history of depression and in patients with depression who died of natural causes.

Editor's Note: Serotonin is the correct expansion of 5-HT. The numbers of 5-HT receptors should be set subscript (eg, 5-HT_1) (**§14.11.5**, Molecular Neuroscience).