

Chapter 10

The Nervous System Part 2



Head and Meninges

- Cephalgia: Headache
- Encephalocele:
- Hydrocephalus: Incr. CSF
- Meningocele:

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• Meningitis: Inflammation of the meninges

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Disorders of the Brain

• Alzheimer's disease:

Loss of brain function due to changes in brain structure; affects memory, thinking and behavior

- Encephalitis: Inflammation of the brain
- Parkinson's disease:

Chronic, degenerative disease of the CNS; involves dopamine; symptoms are movement related

- Tetanus: "Lock jaw"; deadly bacterial infection; preventable through vaccination
- Cognition: Thinking

Brain Injuries

- Amnesia: Memory loss
- Concussion: Shaking brain
- Cerebral Contusion: Brain
 bruise
- Cranial Hematoma:
 - Epidural hematoma:
 - Subdural hematoma:

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Intracerebral hematoma:



Levels of Consciousness

- Conscious: alert
- Syncope: _{fainting}
- Lethargy: listlessness
- Stupor: Impaired consciousness; lack of response
- Coma:

unconscious

• Delirium: DELMAR CENGAGE Learning[®] © 2009 Delmar, Cengage Learning Reversible confused, disoriented state

Decreased mental status



Ischemic Attacks: Restriction in blood flow

- TIA: Temporary interruption

- Ischemic stroke: Blood flow is blocked
- Hemorrhagic Stroke: Brain bleed; when vessels leak or rupture
- Aphasia:

Inability to communicate either through speaking or writing



The Spinal Cord

- Myelitis: Inflammation of the spinal cord
- Myelosis: Tumor in the spinal cord
- Multiple Sclerosis: Autoimmune disorder caused by the demyelination of the nerves
- Poliomyelitis: Viral disease affecting nerves that can cause paralysis; can be prevented through vaccination
- Postpolio syndrome: Recurrence years after initial infection
- Radiculitis: Pinched nerve
- Spinal cord injuries: Often results in paralysis



- Amyotrophic lateral sclerosis (Lou Gehrig's):
 - Damages neuromuscular system causing muscle weakness
- Bell's Palsy:
- Facial paralysis due to damage to a cranial nerve
 Guillain-Barre syndrome:
- Sciatica.
- Nerve pain that runs down thigh
 Peripheral neuropathy:
- - Pain, loss of sensation or motor control •
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Cerebral Palsy

- Characterized by poor muscle control, spasticity and other neurological deficiencies caused by an injury to the part of the brain that controls muscle movement.
- Usually occurs during pregnancy, birth or soon after birth





- Generalized seizure: "Tonic-clonic"; convulsions followed by a loss of consciousness
- Tonic convulsion:

Prolonged, generalized contraction

- Clonic convulsion: Convulsion where muscles alternately contract and relax
- Partial seizure:

Only affect a part of the brain; can be a cue of an oncoming seizure





- Grand mal epilepsy: Tonic clonic seizures
- Petit mal epilepsy: Brief loss of awareness
- Epileptic aura:

A premonition. May consist of flashing lights, a gleam of light, blurred vision, an odor, the feeling of a breeze, numbness, weakness, or difficulty speaking



Treatment Procedures

Anesthesia

- Topical:
- Local:
- Regional:
- Epidural:
- Spinal:
- General:

Treatments

- Analgesics:
- Sedative:
- Barbiturate:
- Phenobarbital:
- Anticonvulsant:
- Hypnotic:

Diagnostic Procedures

- Computed tomography (CT):
- Magnetic resonance imaging (MRI):
- Echoencephalography:
- Electroencephalography:
- Encephalography:
- Myelography: