



Cerebral Palsy

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Cerebral Palsy = Brain Paralysis

- **Definition**
- **Prevalence**
- **Etiology**
- **Classifications**
- **Clinical Presentation**
- **Treatments**
- **Substantially Disabling**



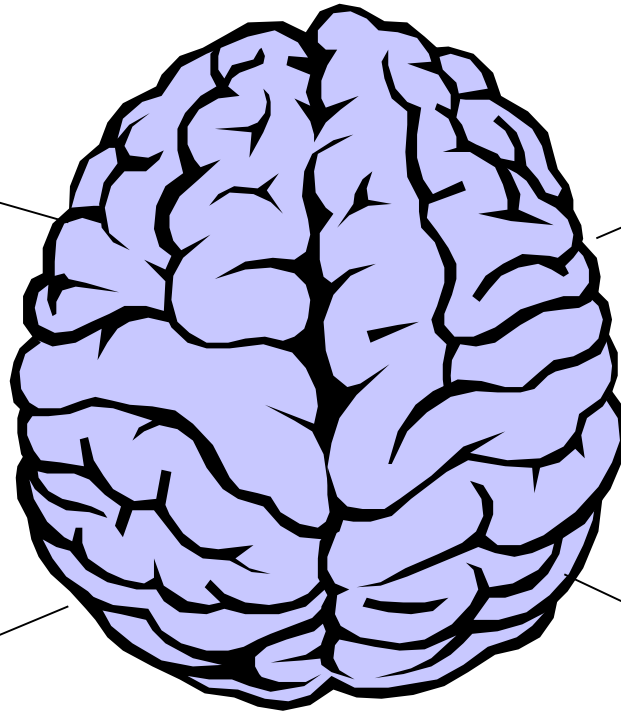
COMPLICATIONS OF NEURODEVELOPMENTAL DISORDERS

Cognitive Dysfunction

Motor
Dysfunction

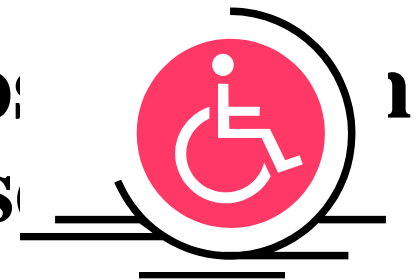
Seizures

Behavior
Dysfunction



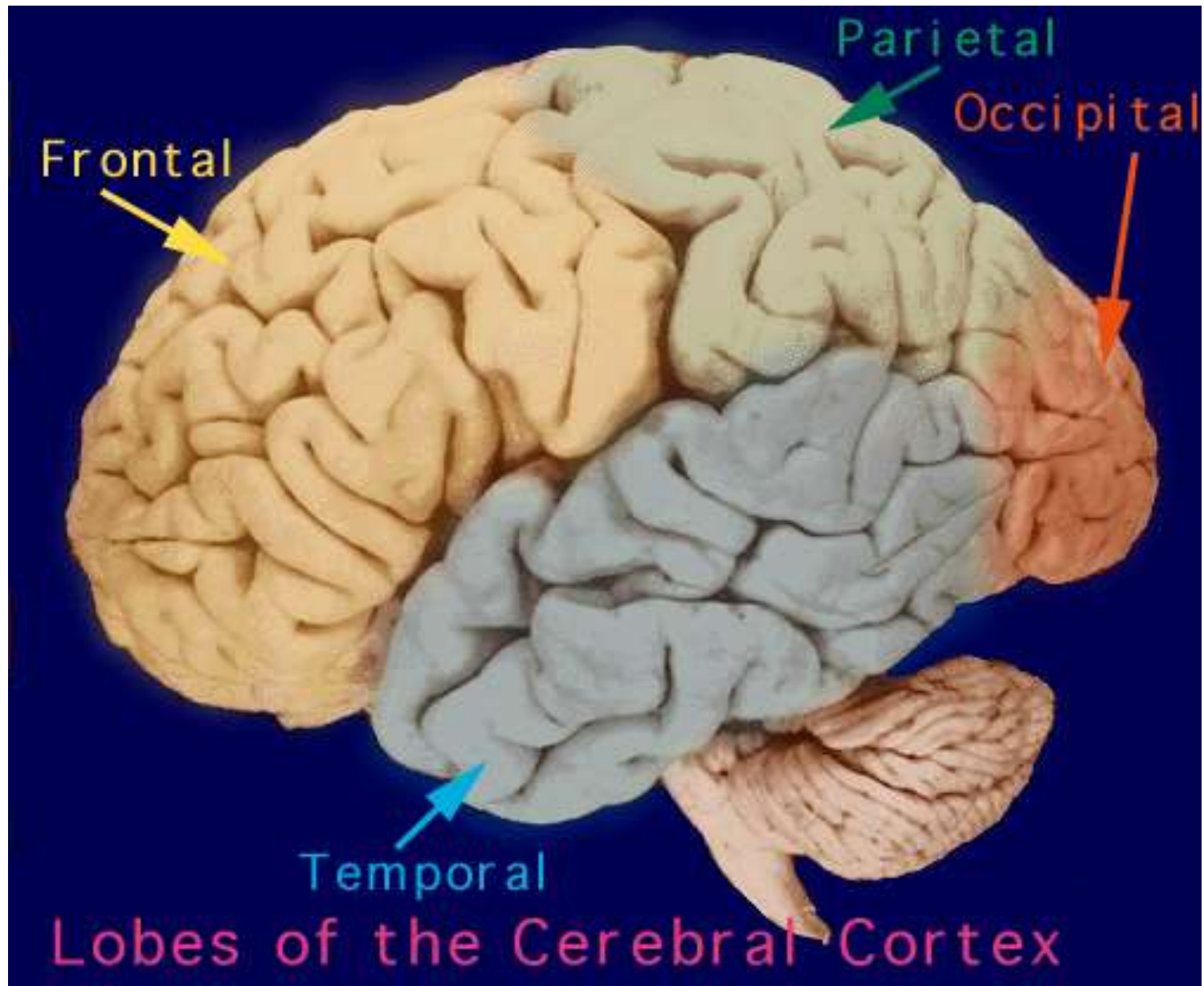
Cerebral Palsy: Definition

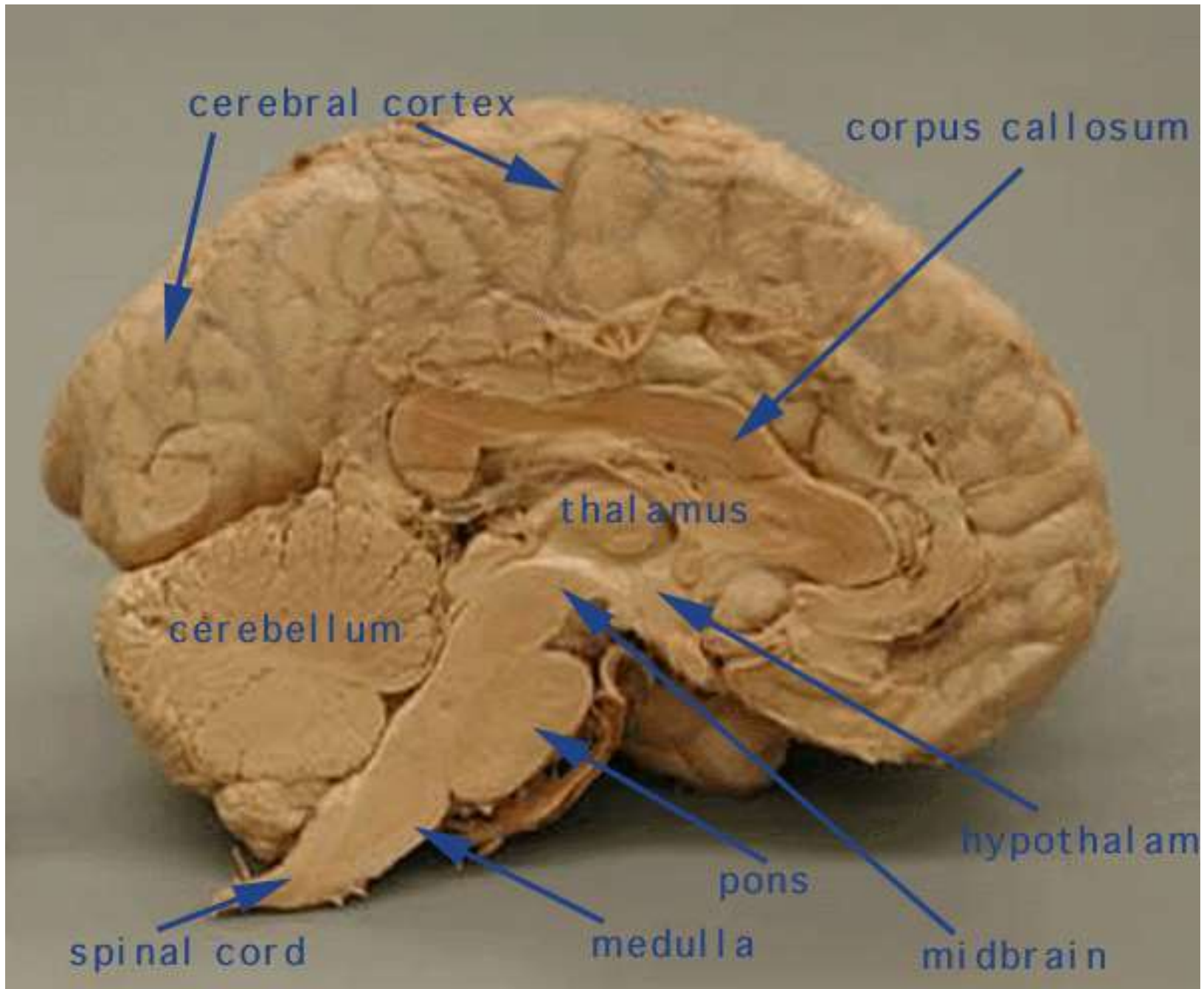
- Cerebral palsy is a **static encephalopathy**
- Encephalopathy = **Brain Injury** that is **non-progressive** disorder of **posture and movement**
- Variable etiologies
- Often associated with epilepsy, motor problems, vision compromise, and cognitive dysfunction



Cerebral Palsy: Prevalence

- **2-4/1000; 7-10,000 new babies each yr**
- **150 years ago described by Dr. Little an orthopedic surgeon and known as Little's Disease**
- **During past 3 decades considerable advances made in obstetric & neonatal care, but unfortunately there has been virtually no change in incident of CP**





cerebral cortex

corpus callosum

thalamus

cerebellum

hypothalamus

pons

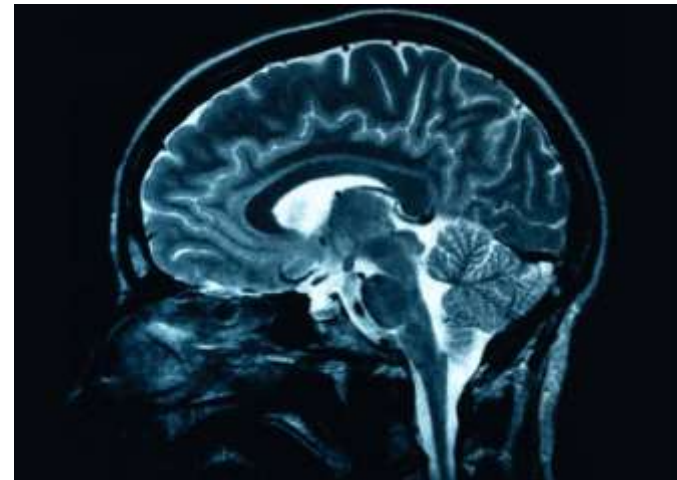
midbrain

spinal cord

medulla

Cerebral Palsy: Classification

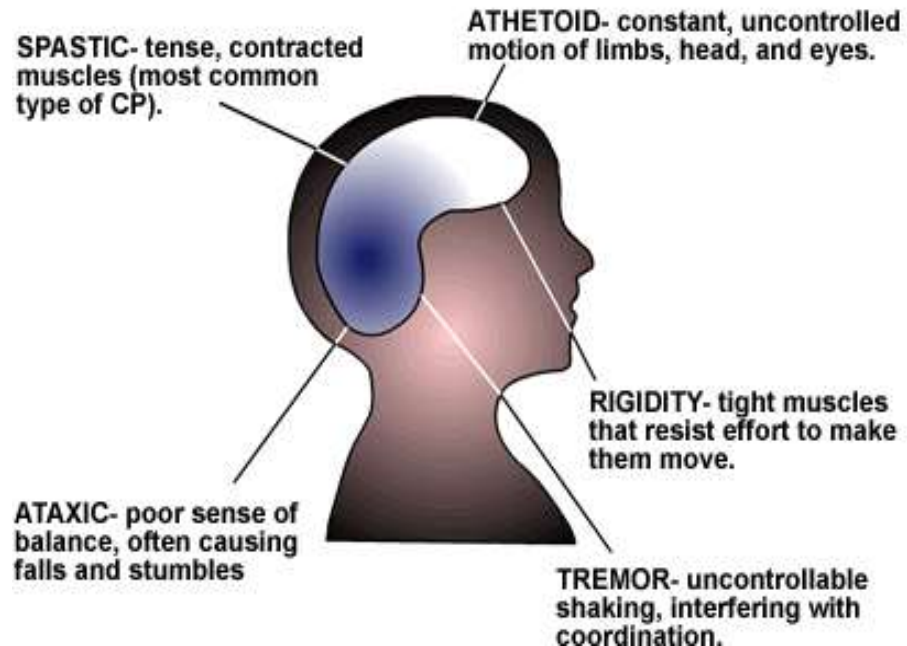
- **Various classifications of Cerebral Palsy**
- **Physiologic**
- **Topographic**
- **Etiologic**



Cerebral Palsy: Physiologic

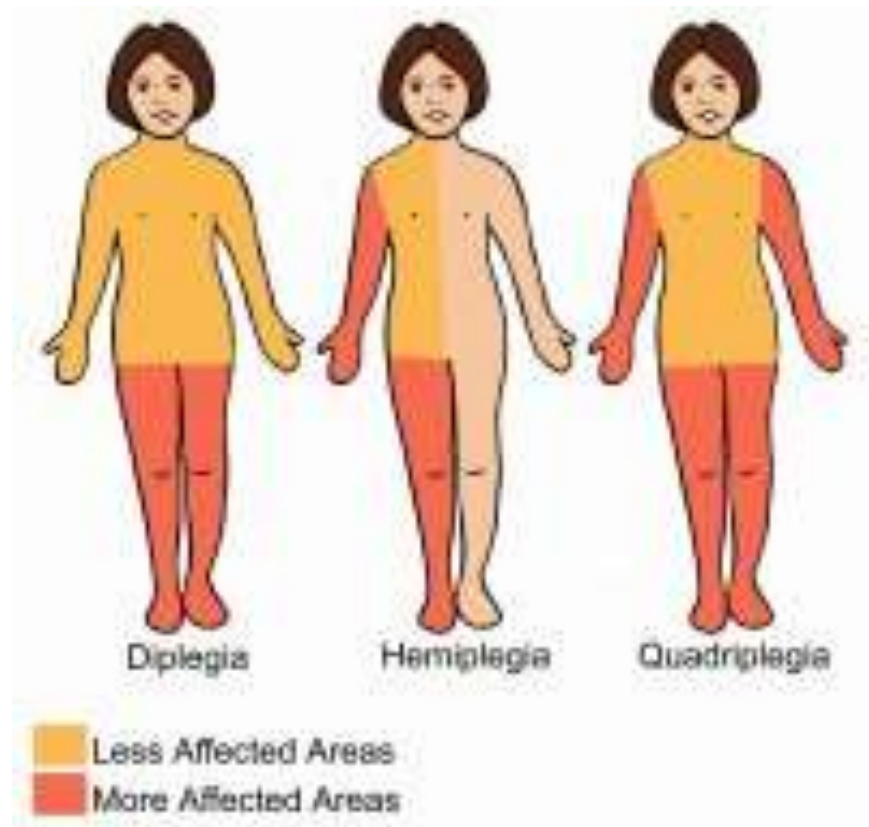
- **Athetoid**
- **Ataxic**
- **Rigid-Spastic**
- **Atonic**
- **Mixed**

TYPES OF CEREBRAL PALSY



Cerebral Palsy: Topographic

- **Monoplegic**
- **Paraplegic**
- **Hemiplegic**
- **Triplegic**
- **Quadraplegic**
- **Diplegic**



Cerebral Palsy: Etiologic

- **Prenatal (70%)**

Infection, anoxia, toxic, vascular, Rh disease, genetic, congenital malformation of brain

- **Natal (5-10%)**

Anoxia, traumatic delivery, metabolic

- **Post natal**

Trauma, infection, toxic

Cerebral Palsy: Clinical Presentation

- Remember that motor developmental progression is from....



Head to Toe

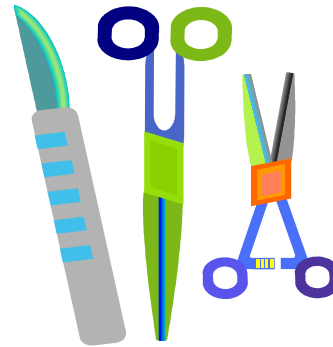


Cerebral Palsy: Complications

- **Spasticity**
- **Weakness**
- **Increase reflexes**
- **Clonus**
- **Seizures**
- **Articulation & Swallowing difficulty**
- **Visual compromise**
- **Deformation**
- **Hip dislocation**
- **Kyphoscoliosis**
- **Constipation**
- **Urinary tract infection**

Cerebral Palsy: Management

- **Neurologic and Psychiatric**
- **OT and PT**
- **Speech**
- **Adaptive equipment**
- **Surgical**
- **Rhizotomy, Baclofen pumps, Botoxin**



Cerebral Palsy

- **What is substantially disabling Cerebral Palsy?**

- **Mobility**
- **Communication**
- **Learning**
- **Self Care**
- **Self Direction**
- **Independent Living**
- **Economic Sufficiency**