

Hemiplegia → one half of Body

- Muscle weakness, lack of coordination and complete paralysis.
- Hemiparesis is partial paralysis.

Causes:

Congenital →

↳ Cerebral palsy, Traumatic delivery etc.

① Acquired  
Vascular → Stroke, Hemorrhage, Atherosclerosis, Aneurysm → rupture, Embolism.

② Islet → Seizure, Todd's paralysis.

Demyelinating - Multiple sclerosis, ADEM etc.

Degenerative - ALS, Corticobulbar degeneration.

Infective - Meningitis, Encephalitis, Cerebral abscess.

Traumatic - Spinal Cord Injury etc; Roadside Fall, Blast.

Tumors - Glioma, meningioma, Tumors (Carcinoma).

Pathophysiology.

Movements of the Body is controlled by Corticospinal (Pyramidal tract).

↓  
From motor areas of brain through internal capsule, and in the brainstem and decussates in the lower medulla and travel down the spinal cord. A some pathway called anterior corticospinal tract does not cross.



→ So injury above the medulla causes  
Contralateral hemiparesis and after  
that causes ipsilateral hemiparesis.

### Types

Facial → Facial Palsy

Cerebral → Cerebral Palsy

Spastic → Severe Deformities

Spinal → Brown sequard syndrome

→ one side injury of spinal cord.

### Clinical Features

- Muscle weakness and stiffness on one side.
- Muscle spasticity.
- Poor fine motor skills. Walking difficulty.
- Poor Balance. Trouble grabbing objects.

Cognitive → Memory, Concentration, Behaviour.

Speech - are common.

- Runters syndrome → Hemiplegics shift their weight to the paralyzed side of the body, resulting in significant motor control loss.

- Unilateral UMN → Extension at hip, knee and ankle and circumduction at the hip, and toe touching the ground on walking putting a semicircle (Hemiplegic gait).

② Weber Syndrome → IIIrd nerve damage → Ipsilateral IIIrd nerve palsy, and contralateral hemiparesis



## Investigation

- CT/MRI, X-ray, USG
- CSF → lumbar Puncture
- Angiography CT, MRA,
- EEG, EMG, Nerve Conduction Test, Evoked potentials.
- Routine Blood test,
- Biopsy. Genetic testing.

## Management

- Maintaining the quality of life? Specific.
- Different therapies, Surgical.
- Airway → Spirometry, Echo, LFT, RFT, Breathing
- Circulation.
- Frequent change of position to avoid bed sores.
- Nutrition / Nasogastric tube,
- Catheter → Urine.
- Stool → Disposable diapers.
- Physiotherapy → Prevent contractures,
- Plasmapheresis,
- Steroidal.
- Anticoagulant.