

Guillian -Barre Syndrome (GBS)

By

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GBS

- Post infective ascending type of peripheral poly neuropathy
- Autoimmune disease(attacks the peripheral nerves)
- Disruption of the myelin sheath
- Axonal degeneration
- Though the cause is unknown, It follows viral infection,(respiratory, gastrointestinal tracts)

- after the first clinical manifestations of the disease, the symptoms can progress over the course of hours, days, or weeks.
- Most people reach the stage of greatest weakness within the first 2 weeks after symptoms appear, and by the third week of the illness 90 percent of all patients are at their weakest.
- Anybody can be affected
- Both sexes
- All ages

Signs & Symptoms

- Tingling sensation appear in both hands and feet
- The weakness or paralysis is usually ascending
- the lower limbs are affected then the upper limbs
- Some times there is involvement of facial nerve leading to lower motor neuron type of paralysis(Bells palsy)

- Sometimes the involvement of facial nerve injury is bilateral(affecting both sides of the face) (bilateral Bells palsy)
- Facial nerve injury some times is first sign of the disease
- In severe cases there is involvement of respiratory muscles leading to mechanical ventilations
- GBS is always treated in hospital where ICU (intensive care unit) facility is available

Signs and Symptoms of lower motor neuron lesions

- Acute flaccid paralysis, reduced muscles tone (hypotonic)
- Diminished or absent tendons reflexes
- Muscles wasting(muscles atrophy)
- Muscles weakness or paralysis
- Fasciculation
- Fibrillation.
- the extensor Babinski reflex is usually absent.

Multidisciplinary team

- Neurologist
- Nurse
- Physiotherapist
- occupational therapist
- Psychologist
- Social worker
- Orthotics specialist

Aims of physiotherapy

To

- gain patient confidence and co operation
- prevent respiratory complications
- maintain vital capacity
- Maintain ROM
- Prevent muscles contracture and deformities
- Prevent joint stiffness
- Prevent pressure ulcer
- Prevent deep venous thrombosis(DVT)

Physiotherapy

- **Respiratory care**
 - Breathing exercises
 - Chest and cough or huff techniques
 - positioning
- **Vascular (DVT)**
 - Ankle pumping exercises
 - Anti DVT stockings
 - Electrically powered pneumatic pump

- **Skin Care**

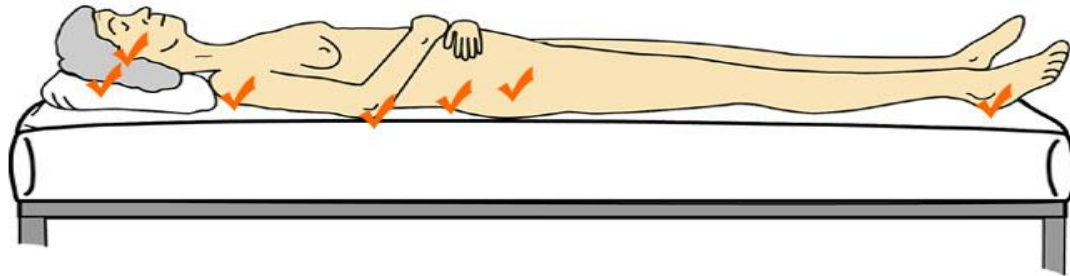
- daily inspection
- positioning
- pillows placement

Pressure ulcer Risk Factors

- Sensory deficit
- Motor deficit
- Sensory & motor deficit

Pressure Areas

- Pressure ulcers most often form over bony areas on the body



Physiotherapy In Acute Stage

- **Musculoskeletal**

- PROM

- AROM

- positioning

Physiotherapy In Acute Stage

- **Psychological support**

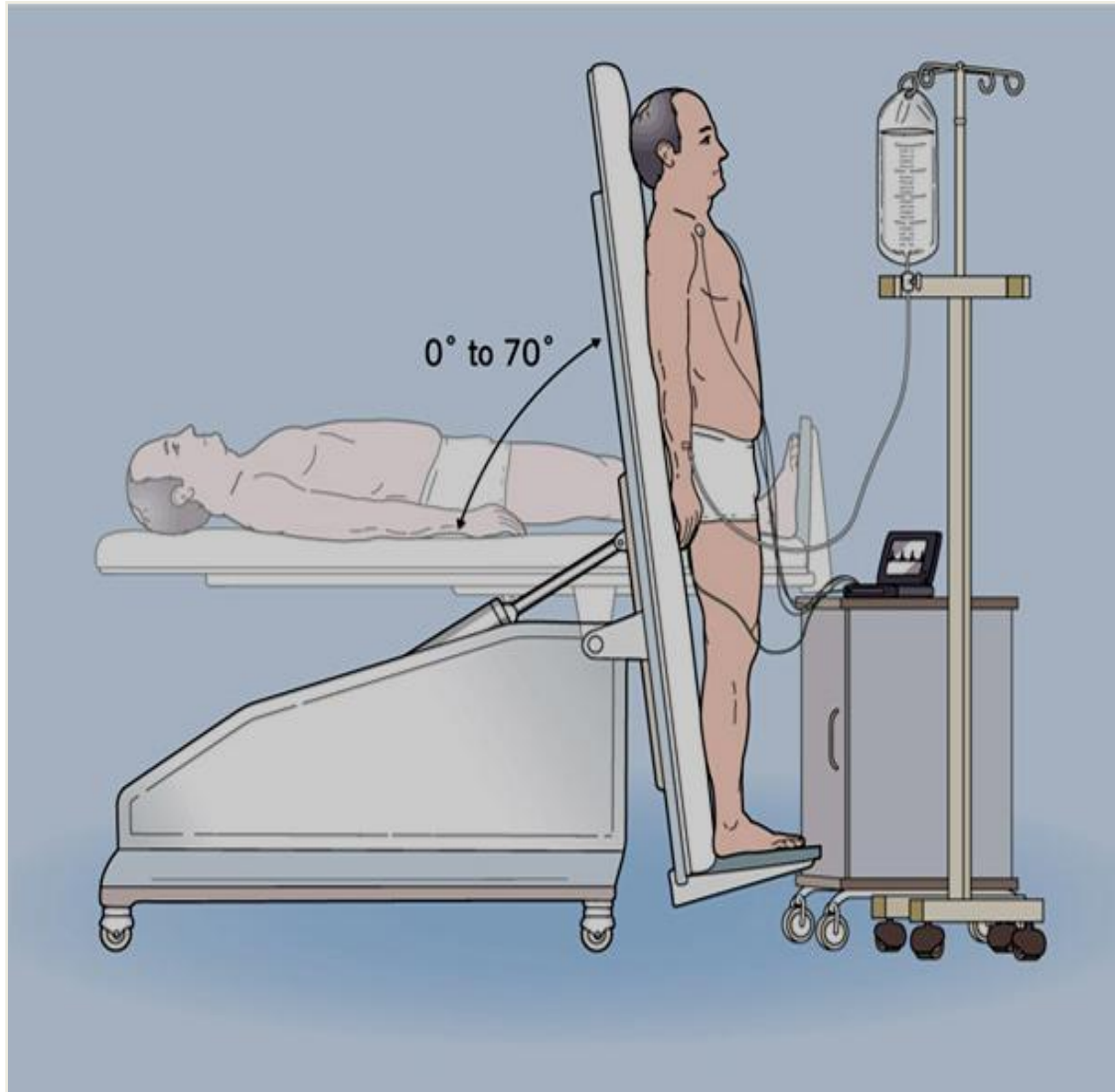
Physiotherapy in Chronic Stage

Acute stage intervention program.

plus

- Tilting Table Studies
 - fainting attacks
 - Sensory re- education
 - maintain joints alignment

Tilt table test



Physiotherapy in Chronic Stage

- **Mat exercises**

- easiness of exercises
- teaching rolling
- independent sitting
- Prepare the patients for self transfers through sliding board

Physiotherapy in Chronic Stage

- **Axial suspension exercises**
 - in gravity eliminated positions
 - muscles grade 2

Physiotherapy in Chronic Stage

- **Suitable cushioned wheelchair**
 - manual wheelchair training
 - Electrically powered wheelchair



Manual Muscles Grading

0 = total paralysis

1 = flicker of muscles contraction

2 = muscles contraction in gravity eliminated plane

3 = muscles contraction against gravity

4 = muscles contraction against gravity plus minimal resistance

5 = muscles contraction against gravity plus maximum resistance

thanks