

**GBS REASONING FORM -WARD**

The following are the areas to be taken into consideration during evaluation of GBS with reasoning for the same

**1. Name:**

- Identification
- Communication

**2. Age:**

- Goal setting for ADL independence
- To plan for the treatment based on age related co-morbidities

**3. Sex**

- Consideration to be taken during personal hygiene- menstrual cycle

**4. IP no:**

- Maintenance of record
- Medico logical importance

**5. Date of admission:**

- To know the onset of injury and time taken to give medical intervention after injury.

**6. Date of examination:**

- To interrupt the prognosis of the treatment from the examination date to Discharge.

**7. History**

The following details are must from the history

- Date of onset of signs and symptoms (predicts the recovery)-acute and chronic
- Patterns & sequence of symptom onset describes about proximal to distal and vice versa
- Progression of the condition (any signs of worsening or recovery to be noted- weakness spreading from distal to proximal site, involvement of respiratory centers)
- Medications used
- Plasmapheresis, Ivg – the units used will give the information about the prognosis of the patient.
- Timing of the medications started with reference to the symptoms noted also gives the information about the prognosis of the patient.

- Medications for DVT eg: heparin (if it is given in geriatric patients chances of fresh bleed is present)

➤ Past medical :

- The nature of present condition can be related to past illness which can help in knowing the complications, consequences and present condition sequel.
- Ventilated: yes /no – to decide the treatment plan and goal and improve respiratory function and give bronchial hygiene.

**8. Mode settings**

- Tracheotomy or O2 support based on which the short term goal will be decided and aim for early wean off and EEI can be calculated.

**9. Investigation**

- Radiological examination
- Blood test (Ig)
- Electrophysiological tests (EMG/NCV)
- Spinal imaging (MRI/CT)
- Medical management (plasmapheresis)
- Medications
- Blood test –Ig level and which globulin, is advised for plasmapheresis
- Electrophysiological studies
  - NCV studies will suggest the feature of demyelinating disorders
- Radiological findings
  - Chest x ray will suggest any features of pneumonia or old.
- Medical management will help to identify the complications associated during injury and the first aid precautions taken and state of the condition.
- Surgical/medical: any surgical fixators and medication used to prevent complications can be understood for deciding the treatment protocol.

**10. Spo2:**

- Will give the status of respiratory system,
- Presence of any secretions,
- Added breath sounds

- It helps as indicator for underlying worsening pathologies and will help us to decide whether to proceed with treatment session or postpone.
- O2 capacity will help to plan exercise goal, intensity of exercise regime to set, rate of perceived excursion to know the met value.

**11. Body build**

- Present and premorbid weight to be considered as it is significant in development of pressure sore (thin- due to bony prominences or obese due to shear force and difficulty in movement )
- Discharge plan (need of any special equipment and attender care).

12. **Attitude of limb:** to prevent contracture, contact of bony prominence causing pressure sore

13. **External appliances:** pressure stockings.

**14. Respiration**

- Strength of respiratory muscles: to be checked by spirometer and PFT
- Rom: upper and lower chest expansion
- Phonation ability: may be reduced due to involvement of respiratory muscles
- Evaluation of cough: strength of the cough, ability to clear secretions.
- Nosocomial infections.
- Chest formation shape, symmetry and bony abnormalities
- Auscultation:
  - Abnormal breath sounds: suggestion of pneumonia
  - Reduced breath sounds: suggestion of atelectasis/ collapse
- Symmetrical involvement
- Breathing pattern
- Diaphragmatic excursion

15. **Vertical tolerance** (presence of nursing staff and constant monitoring of the vitals , bp, rr, spo2 to be done for each 10 degree elevation and coming back to neutral)

- In bed
- Reclining wheel chair

- Tilt table

#### 16. Skin evaluation

- Vulnerable skin over bony prominences on both sides of the body to be noted
- Scar tissue breakdowns
- Location and grades

#### 17. Sensory evaluation

Superficial- touch, pain, temperature, pressure

- Deep- joint movement sense, joint position sense, vibration
- Cortical- tactile localization, 2 point discrimination, stereognosis, barognosis, graphesthesia

Sensory grading:

1 intact – normal accurate response

2 decreased – delayed responses

3 exaggerated – increased sensitivity or awareness of stimulus after it has ceased

4 inaccurate – inappropriate perception to given stimulus

5 absent – no response

6 inconsistent or ambiguous – response inadequate to assess

#### 18. Musculoskeletal examination

Range of motion

- Of all available joints in both upper and lower limbs
- Selective tightness in muscle ( hamstring and long flexors of hand- hamstrings will assist in independent sitting and long flexors of hand will assist in hand grip)
- Any immobilization device used ( braces, corsets, other orthotics)

Muscle strength

- Of all available muscle of both sides excluding the key muscle to be taken. As the consideration on non key muscles is important for functional recovery of the patient
- Any trick movements patient is doing for available ROM

- Any immobilization device being used by the patient which will not allow to assess the strength.
- Can use hand held dynamometer- group muscle strength

Muscle strength should be assessed in the extremities, neck, and trunk. This is accomplished by providing resistance to movement of muscle groups in both directions and assessing any indication of diminished strength

0/5 – No contraction

1/5 – Muscle flicker, but no movement

2/5 – Movement possible, but not against gravity (contraction in the horizontal plane)

3/5 – Movement possible against gravity, but not resistance

4/5 – Movement possible against some resistance (can be subdivided further, +/-)

5/5 – Normal strength

Muscle tone

- Quality -is the tone same always, or fluctuating, happens during change in the position ,is it symmetrical

Reflexes-superficial, deep, pathological reflexes

- To check whether there is improvement in tone
- Note that the position of the patient, correct tapping site and adequate tapping stimulus should be given and the results to be compared with normal side.
- If needed facilitation for the reflex to be given by clenching the teeth, gripping of an object or jendrassiks maneuver
- DTR and grading for ul and ll
- Pathological reflex:
  - Babinski sign ( extensor response suggest pyramidal tract involvement)
  - Oppenheim reflex,
  - Chaddock sign
  - Hoffmann's reflex.(presence of the same indicate pyramidal tract involvement)

To test the functional sensory and motor fibers of a respective spinal level.

A reflex response should be noted immediately following the hammer stimulus. The right and left side response should be compared, with specific attention paid to asymmetries

- 0 – Absent reflex
- 1+ - Trace response
- 2+ - Normal response
- 3+ - Brisk response
- 4+ - Non-sustained clonus (repetitive vibratory movements)
- 5+ - Sustained clonus
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**19. Coordination**

- Coordination skill prior injury
- Kinesthetic awareness
- Timing
- Accuracy of movement

**20. Balance**

- Presence of protective extension reaction
- Presence of equilibrium reaction
- Presence of static and dynamic balance reaction

**21. Bowel and bladder status**

- Feeling of urination ,control of urination
- Type of catheterization(indwelling , condom catheter or using diapers)
- Any urinary infection or hospitalization for the same (including frequency)
- Any urinary accidents – spillage of the urine during transfer or WC mobilization.

**22. Posture**

- Posture should be evaluated using grid chart where bony levels are checked followed by true and apparent length, pelvic tilts, squaring of pelvis, scoliosis changes.

**23. Functional activity**

- CROMS
- SCIM

**24. Gait evaluation :**

- Using kinovea software
- In plain and uneven terrain

**25. Ambulation**

- Wheel chair and walking
- Indoor and outdoor
- Dual task
- Safe falling

26. **Orthotic devices** and assistive aids been used for all functional activity, ambulation and others to be noted.

- HKAFO with pelvic band
- KAFO
- AFO
- Taylors brace
- Hard cervical collar
- Wrist functional splints
- DVT stockings
- Heel cushions (gel)
- Others if any specify

**27. Wheel chair mobilization**

- Wheel chair shifting technique
- Mode of shifting
  - If vitals are stable bed mobility exercise can be initiated followed by wheel chair transfer with assistance or harness.

**28. Investigation**

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## **PROGRESS REPORT FORM**

In the progress report form the following areas has to be mentioned,

1. Respiratory status: PFT values, Muscle strength and incidence of pneumonia.
2. EEI ,MET achievements.
3. Status of pressure ulcer: Measurements from the base line evaluation day
4. Transfer skills: In relation with CROMS scale
5. Ambulation skills: In relation with CROMS scale
6. Vertical orientation skills: In relation with CROMS scale.
7. Muscle strength : MMT of each muscle with HHD values
8. PFT and EEI
9. FIM for all domains.
- 10.Home programme and long term rehabilitation plan
- 11.Orthotics and assistive devices use.

## **DISCHARGE SUMMARY FORM**

The discharge summary should include the status of the patient at the time of admission and weekly goals set and achieved with the time of discharge goals achieved

The areas to be written are

1. Muscle strength
2. Ambulatory and mobility status
3. CROMS/SCIM
4. Orthotics and assistive device usage status
5. Fatigue status
6. NCV Report status
7. PFT report status

It should also have the HEP (Home Exercise Programme) status, Care takers education material and review dates for follow up.