

Department:	Rehabilitation Centre		
Document:	Multidisciplinary Policy and Procedure		
Title:	Physiotherapy Protocol for Down Syndrome		
Applies To:	All Physiotherapist, Physicians and Nurses		
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1. PURPOSE:

- 1.1 To improve strength.
- 1.2 To improve developmental skills.
- 1.3 To improve balance and coordination.
- 1.4 To minimize the development compensatory movement patterns.
- 1.5 To improve physical fitness.
- 1.6 To promote achievement of gross motor skills such as sitting, crawling and standing

2. DEFINITIONS:

- 2.1 Down syndrome (DS): It is a genetic disorder in which babies are born with an extra copy of chromosome 21. The extra copy of chromosome 21 in babies born with DS changes the typical development of the brain and the body, causing mental and physical challenges.

3. POLICY:

- 3.1 Patient should have a Referral Form from a paediatrician.
- 3.2 History must take from the patient's/family by the Physiotherapist.
- 3.3 Patient will be evaluated & assessed by the physiotherapist.
- 3.4 Physiotherapist will give P.T. management/treatment plan according to the condition of the patient, and will fill out the Assessment Form.

4. PROCEDURE:

- 4.1 Management/treatment should be planed properly by the physiotherapist according to the case.
- 4.2 Management /Plan DS :
 - 4.2.1 Passive range of motion exercises (PROME) and Active range of motion exercises (AROME).
 - 4.2.2 Strengthening and weight bearing exercises.
 - 4.2.3 Ball exercises and Balance exercises.
 - 4.2.4 Mat exercises.
 - 4.2.5 Ergometer and treadmill exercises will be given depending on the condition and age of the patient.
 - 4.2.6 Standing on the tilting table depending on the patient condition and age.
 - 4.2.7 Stairs climbing depending on the case.
 - 4.2.8 Gait training with parallel bars depending on the case.
 - 4.2.9 Play therapy.
- 4.3 Frequency and duration of treatment
 - 4.3.1 Explains, gives information and home instruction/program to the family regarding the patient condition.
 - 4.3.2 Appointment will be given to parents twice a month depending on the patient case.

4.4 Discharge Planning

- 4.4.1 Any patient after 2 months of treatment is re-evaluated by the therapist to see if the planned goal has been reached or not.
- 4.4.2 If the patient exceeds 2 months of treatment or more without any noticeable improvement, a consultation is requested from the rehabilitation doctor to take an opinion based on the rehabilitation program. Either the patient is discharged to complete the treatment at home or he is transferred to a higher rehabilitation center for intensive treatment.
- 4.4.3 If the patient's condition improves during the 2-month treatment period, during which the treatment method is changed according to the patient's need and the treatment period is extended according to the vision of the therapist and upon achieving the desired goal, the patient is discharged.
- 4.4.4 Any patient who reaches the treatment goals set by the therapist is re-evaluated and discharged.
- 4.4.5 Patients who were recently discharged from rehabilitation after two months of treatment and became the utmost goal of treatment is to maintenance only will not be accepted in the Rehabilitation Department.

5. MATERIALS AND EQUIPMENT:

- 5.1 Hot Moist Pack (HMP) Hydro-collator unit.
- 5.2 Electrical Muscle Stimulator (EMS).
- 5.3 Ergometer.
- 5.4 Tilting Table.
- 5.5 Vestibular Ball.
- 5.6 Stairs.
- 5.7 Parallel Bars.
- 5.8 Treadmill.

6. RESPONSIBILITIES:

- 6.1 Physician: Assess, diagnose and prescribe medicine.
- 6.2 Physiotherapist: Initial assessment, evaluates and fills out the General Evaluation Form and documents data in the Referral Form.
- 6.3 Nurse: Triage, and if the patient is more than 12 she should help male physiotherapist to do physiotherapy.

7. APPENDICES:

- 7.1 Referral form. (Electronic)
- 7.2 Assessment forms. (Electronic)
- 7.3 Follow up notes. (Electronic)
- 7.4 Discharge form. (Electronic)
- 7.5 Education form. (Electronic)

8. REFERENCES:

- 8.1 Physiotherapy department Protocols in MCH- Al-Jouf.
- 8.2 Paediatric Physical Therapy; by Jan Stephen Tecklin.

9. APPROVALS:

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