HEALTH HOLDING

HAFER ALBATIN HEALTH CLUSTER
MATERNITY AND
CHILDREN HOSPITAL

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| **Department:** | Rehabilitation Centre | | |
| **Document:** | Multidisciplinary Policy and Procedure | | |
| **Title:** | Occupation Therapy Management Protocol for Splinting | | |
| **Applies To:** | All Occupational therapist, Physicians and Nurses | | |
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## 1. PURPOSE:

1.1 Occupational therapists use splints as a therapeutic tool to support, immobilize, protect, and promote Splints can be used to restrict movement and provide support to promote healing in cases of acute injuries, fractures, or surgical repairs.

1.2 Dynamic or static progressive splints are used to add mobilizing tension, influencing tissue healing and scar maturation. They help prevent the development of restrictive scar tissue, which can limit tendon excursion and normal joint motion.

1.3 Splints can be used to increase range of motion around a joint. They are particularly helpful in cases where soft tissue has been stiffness due to spasticity, burns, or scarring. Splints are designed to stretch the soft tissue gradually over time, allowing for improved joint mobility

1.4 Functional Improvement: In some cases, splints can assist in improving functional movement by providing support and stability; they may help individuals perform activities of daily living with greater ease and independence.

1.5 Splints are used to immobilize and stabilize fractured bones or dislocated joints. By restricting movement, splints help prevent further injury, reduce pain, and promote proper healing.

1.6 Functional Improvement: In some cases, splints can assist in improving functional movement by providing support and stability; they may help individuals perform activities of daily living with greater ease and independence.

1.7 Pre- and Post-operative Care: Splints may be utilized before and after surgical procedures to immobilize and protect the surgical site. They help maintain the alignment of bones or joints, prevent postoperative complications, and support the healing process.

1.8 Splinting can be a part of the comprehensive treatment plan for Erb's palsy, a condition that involves weakness or paralysis of the arm due to injury to the brachial plexus nerves. Splints can help support the affected arm, promote proper alignment, and facilitate functional use. Here are some considerations for splinting in Erb's palsy.

1.9 Splinting can be a helpful intervention for spastic patients to manage their symptoms and improve functional abilities. The primary goal of splinting is to maintain or improve the alignment and position of the affected limb, promote functional movement, prevent contractures, and enhance independence in daily activities.

## 2. DEFINITIONS:

2.1 A splint is a medical device or material used to support, immobilize, protect, and maintains position or movable part depending on the condition.

2.2 Occupational therapy role in splint can be in acute, inpatient and outpatient rehabilitation.

2.3 Splint role in inpatient plays an important role in the care and treatment of inpatients, particularly those with orthopedic or neurological and musculoskeletal conditions. A splint is a device used to immobilize and support an injured or unstable body part, such as a bone, joint, tendons or soft tissue.

2.4 Splints play an important role in the rehabilitation process. Splints are used to protect, support, and immobilize the affected area, promoting healing and preventing complications such as contractures and deformities.

2.5 There are two Types of Splints static and dynamic Static Splints, which is used to immobilize and rest a diseased or injured area, allowing for uninterrupted healing. They are commonly used to support healing structures such as fractures, ligament strains or repairs, and to decrease pain. Dynamic splint is designed to add mobilizing tension to influence tissue healing and scar maturation. They help minimize the development of restrictive scar tissue, which can limit tendon excursion and normal joint motion.

## 3. POLICY:

3.1 Patient should have a referral form from rehabilitation doctor or paediatrician.
3.2 Patient will be evaluated and assessed by occupational therapist.
3.3 Appointment will be given depending on the availability of the therapist schedule and severity of the case.
3.4 The patient's conditions are re- evaluated after one month of treatment or after any change her condition if she needs a consultation from a rehabilitation doctor or discharging the patient.
3.5 The patient is given home exercise after the first treatment session.

## 4 PROCEDURE:

4.1 Occupational therapist will determine the goal of treatment after the initial evaluation.
4.2 In the first visit:
- 4.2.1 Occupation therapist take medical history for patient
- 4.2.2 Occupational therapist discusses the patient's symptoms in detail with the patient family.
- 4.2.3 Detecting risk factors association with condition.
- 4.2.4 Occupational therapy assessment for patient movement.

4.3 Management:
- 4.3.1 Splints provide support and protection to injured or weakened joints, tendons, and muscles. They can be used to alleviate pain, stabilize joints, and prevent further damage during functional activities
- 4.3.2 Splints provide support and protection to injured or weakened joints, tendons, and muscles. They can be used to alleviate pain, stabilize joints, and prevent further damage during functional activities.
- 4.3.3 Provided for orthopedic injury including fractures, stiffness, edema management, tendon injuries.
- 4.3.4 Maintaining or improving range of motion (ROM): Splints can be used to maintain or improve the range of motion in joints affected by spasticity.
- 4.3.5 Splints can play a crucial role in the rehabilitation process. Splints are used to protect, support, and immobilize the affected area, promoting healing and preventing complications such as contractures and deformities
- 4.3.6 Splints can play a crucial role in the rehabilitation process. Splints are used to protect, support, and immobilize the affected area, promoting healing and preventing complications such as contractures and deformities.

4.4 Frequency and duration of treatment:
- 4.4.1 Frequency of visits will depend on severity of the case (1-3 times / week).
- 4.4.2 Timing will depend on the availability of the physiotherapist & patient condition.
- 4.4.3 Home instructions/program is a must for family or care giver about care condition

4.5 Discharge Planning:
- 4.5.1 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.
- 4.5.2 Either the patient is discharged to complete the treatment at home or he is transferred to a higher rehabilitation centre for intensive treatment.
- 4.5.3 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.
- 4.5.4 Any patient who reaches the treatment goals set by the therapist is re-evaluated and discharged.

4.5.5 Patients who were recently discharged from rehabilitation after two months of treatment and became the most goal of treatment is to maintenance only will not be accepted in the Rehabilitation Department.

## 5. MATERIALS AND EQUIPMENT:

5.1 Thermoplastic material.
5.2 Low-temperature thermoplastic materials.

## 6. RESPONSIBILITIES:

6.1 Physician: Assess, diagnose and prescribe medicine.
6.2 Occupational therapist: 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 American occupational therapy association.
8.2 Post burn Upper Extremity Occupational Therapy - PubMed](https://pubmed.ncbi.nlm.nih.gov/28363296/) - Acute Phase: Edema control and pressure relief [[2]](https://www.physiopedia.com/Splinting_for_Burns). -Intermediate Phase: Tissue elongation and graft protection [[2]](https://www.physio-pedia.com/Splinting_for_Burns
8.3 Long-term Phase: Tissue elongation [[2]](https://www.physio-pedia.com/Splinting_for_Burns). Update on the Practice of Splinting During Acute Burn Admission From the ACT Study" [[2]](https://pubmed.ncbi.nlm.nih.gov/34490885/)
8.4 [Post burn Upper Extremity Occupational Therapy - PubMed](https://pubmed.ncbi.nlm.nih.gov/28363296/)
8.5 [Update on the Practice of Splinting During Acute Burn Admission From the ACT Study - PubMed](https://pubmed.ncbi.nlm.nih.gov/34490885/) (https://plexusnc.com/splints-occupational-therapy-hand-rehabilitation/).

## 9. APPROVALS:

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