

Orthosis And Spasticity In Upper Extremity

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Introduction

Occupational Therapy interventions for spasticity is vast and may include strategies as simple as positioning patient in bed to using electrical modalities combined with functional task for recovery.

Occupational Therapy Approaches

Remediation/Restoration Of A Skill Or Ability



Compensation/Modification/Adaptation To Enhance Performance Or To Prevent Injuries



Retention And Enhancement Of Skills

Orthosis

An orthosis is an externally applied device that is designed and fitted to the body to achieve one or more of the following goals:

1. Control biomechanical alignment
2. Correct or accommodate deformity
3. Protect and support an injury
4. Assist rehabilitation
5. Reduce pain
6. Increase mobility
7. Increase independence

(The Australian Orthotic and Prosthetic Association)

Aims In Applying Orthosis For Spasticity

Reduction in spasticity
 Prevention of contracture
 Improvement in functional outcome
 Reduction in pain
 Prevention of edema
 Positioning
 Skin care and hygiene

(Lannin and Herbert 2003)

Dynamic Splints

- Functional
- Bulky
- Expensive
- Regular follow up



Slings

- To reduce stress from gravitational pull while a patient is standing and walking
- To protect the upper extremity during transfer
- To reduce shoulder pain
- To maintain proper glen humeral alignment
- To correct glen humeral alignment of subluxed shoulder.
- To reduce arm and hand edema

(Dominican university of California- 2013)



Universal Arm Sling



Givmohr Sling



Polysling



Bobath Sling

Conclusion

Orthosis for spasticity should be used in conjunction with other modalities of treatment for best results

Regular monitoring with modifications to the orthosis and its schedule is very vital to prevent secondary complications.