

Optimizing Patient Outcomes: The Role of Fabricating Orthoses in Occupational Therapy in Acute Care

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BACKGROUND

Fabrication of upper extremity orthosis requires a unique combination of occupational therapy practitioners (OTPs), such as occupational therapists and occupational therapy assistants with creative abilities and sound knowledge of anatomical, biomechanical, physiologic, and healing principles related to injury, surgery, and disease. Orthotic design and fabrication can be one of the most challenging and enjoyable aspects of being an OTP (Jacobs & Austin, 2022, pp. 2–24).

PURPOSE

The poster highlights the importance, techniques, and benefits of splinting in an acute care hospital, specifically at the University Medical Center (UMC).

IMPORTANCE OF ORTHOSIS IN ACUTE CARE

Orthotic devices can be rigid and semi-rigid to support weak or deformed body parts or limit or reduce motion in a diseased or injured body part (CMS 2008, Coverdale, 2012). It can also prevent or correct deformity, maintain or improve alignment, improve or restrict motion, and increase function. The most common conditions and injuries in acute care that require orthosis are burns, fractures, soft tissue injuries such as tendon repair, tone (spasticity) among neurologic conditions, and post-surgical immobilization.

METHODS & TECHNIQUES

There is no cookbook that can be used for every patient. OTPs must individualize their approach according to each patient's specific needs.

PROCESS is a highly organized, systematic approach to orthotic fabrication.

- P**-attern creation
- R**-efine pattern
- O**-ptions for material
- C**-ut and heat
- E**-valuate fit while molding
- S**-trapping and components
- S**-urvey completed orthosis (Jacobs & Austin, 2022, pp. 134).



BEST PRACTICES

Assessment and Selection: collaborate with surgeons on common diagnoses seen at University Medical Center criteria for selecting the appropriate type of splint based on injury, patient condition, and expected outcomes.

Patient Education and Involvement: Highlight the importance of educating patients about their splints, care instructions, and expected outcomes.

Interdisciplinary approach: Emphasize collaboration among healthcare providers such as physicians/surgeons, nurses, occupational therapists, and physical therapists fabricating orthosis outcomes in acute care. OTPs can fabricate orthosis in the operating room right after surgery.

CONCLUSIONS

Fabricating an orthosis is one part of a comprehensive rehabilitation program. For effective orthotic intervention, the OTPs must support the staff, patient, and caregiver in distinguishing the implication of compliance and be mindful of the orthoses' purpose. Why are they wearing them? The orthoses must be comfortable to wear, convenient to use, and have a suitable aesthetic look for the wearer. Acceptance of the need to use orthosis in the patient's routine; otherwise, it may have unfavorable effects (Jacobs & Austin, 2022, pp. 2–24).

FUTURE DIRECTIONS

Create educational material for staff and patients' improvements regarding fabricating orthosis best practices within the UMC acute care settings.

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