

Systematic/Meta-Analytic Review Posters

Systematic and Meta-Analytic Review Poster 742959

Effectiveness of Therapy Interventions for Post Burn Heterotopic Ossification About the Elbow: A Systematic Review



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Objective(s): To investigate the validity of only using active range of motion and/or passive ROM within the pain free range once a diagnosis of heterotopic ossification about the elbow is given, post burn.

Data Sources: All data was gathered via computerized databases. No time restrictions were imposed. A variety of computerized databases were searched, however relevant data was only gathered from PubMed and Web of Science.

Study Selection: Criteria for selected studies had to include participants that were diagnosed with heterotopic ossification about the elbow following a burn injury. Treatment of the injury had to include range of motion exercises either without surgical intervention or before surgical intervention. The use of post surgery ROM exercises were not included.

Data Extraction: Synthesizing the studies' information into an evidence table and then into a bias table, with all authors separately evaluating each study's biases and then cross referencing biases between authors to eliminate discrepancies.

Data Synthesis: The main results of the systematic review are quantitative. First, the authors created a research question. Next, they met with a research librarian. Upon doing this, the authors searched PubMed, CINAHL, Web of Science, OT Seeker, PsycInfo, PEDro, and a variety of online burn injury related journals. After searching titles, abstracts, and entire articles, the aligning articles were selected. Evidence tables and bias tables were used to obtain the results.

Conclusions: The evidence is limited to suggest that ROM within the pain free range should be the standard of care. Further research, including randomized controlled trials, should be performed to determine effective therapeutic protocols for treatment of heterotopic ossification about the elbow, following a burn injury.

Author(s) Disclosures: N/A.

Key Words: Heterotopic Ossification, Burn Injury, Therapeutic Protocol, Range Of Motion, Elbow

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Lower Extremity Prosthetic Gait Training: A Clinical Practice Guideline



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Objective(s): The purpose of this guideline is to aggregate the available evidence on the elements and strategies of optimal prosthetic gait training for individuals with lower extremity amputation in the form of a succinct Clinical Practice Guideline.

Data Sources: A Medline Search was conducted using the following search terms: ("Physical Therapy;" OR "Physical Capacity;" OR

"Exercise" OR "Gait Training") AND ("Amputation" OR "Prosth*") AND ("Systematic Review" OR "Meta-Analysis").

Study Selection: Abstracts were reviewed to identify those systematic reviews and meta-analyses that aggregated the observations of clinical trials related to physical therapy for the lower limb amputee. Three publications ultimately met this criteria

Data Extraction: In more recent publications, where authors provided explicit evidence statements, these were extracted for subsequent synthesis. If explicit evidence statements were not provided, well-supported narrative statements were extracted.

Data Synthesis: Recommendation 1: Therapeutic gait training programs under the supervision of a physical therapist should be an integral part of post prosthetic rehabilitation.

Recommendation 2: Therapeutic gait programs should extend beyond supervised ambulation training to include tactile, verbal, and visual feedback, as well as psychological awareness training. These may occur during both traditional over ground gait re-education, and where available, treadmill training with or without body weight support.

Recommendation 3: Therapeutic gait programs may include "part to whole" gait training including pre-gait activities, resisted gait interventions and functional gait activities.

Recommendation 4: To compliment therapeutic gait training activities, the physical therapy program may also include specific functional exercise programs including specific muscle strengthening, balance training, and targeted endurance activities to enhance aerobic capacity.

Conclusions: Available evidence supports a range of therapeutic gait training modalities beyond supervised ambulation.

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Key Words: Amputation, Prosthesis, Gait Training, Therapeutic Gait Training, Physical Therapy

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Review of Psychometrics for Performance-Based Measures of Cognitive Instrumental Activities of Daily Living



Lauren Terhorst (University of Pittsburgh), Jessica Kersey, Rachelle Brick, Elizabeth Skidmore

Objective(s): To review the literature for psychometric properties of seven selected performance-based measures of cognitive instrumental activities of daily living (IADLs).

Data Sources: Two occupational therapists with expertise in cognitive IADLs examined systematic reviews to identify performance-based measures with evidence of relevance and feasibility for administration in post-acute care settings. Seven instruments were identified as relevant: Every Day Problems Test, Revised Observed Tasks of Daily Living, Medication Management Instrument for Deficiencies in the Elderly, Executive Function Performance Test, Multiple Errands Test, Rabideau Kitchen Evaluation-Revised, Performance Assessment of Self-care Skills. A literature search for psychometric studies of each measure was conducted using PubMed. Reference sections of relevant articles were also searched.