

Innovative Bolster Dressing Techniques for Burn Patients in Acute Care: An Interdisciplinary Perspective

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BACKGROUND

Burn injuries are a critical concern in acute care settings, requiring effective and innovative dressing techniques to promote healing and minimize complications. This poster explores the use of bolster dressings in managing burn wounds, highlighting their benefits, application strategies, and rehabilitation outcomes.

PURPOSE

To present the efficacy of bolster dressings in burn care.
To outline the procedure for applying bolster dressings.
To discuss patient outcomes and clinical implications among doctors, nursing, and occupational therapy.

METHODS

Patient Selection: Patient with partial and full-thickness upper extremity burns.

Bolster Dressing Application: This step-by-step procedure involves a split-thickness skin graft, sterile gauze (xeroform), foam, or dressings sewn sutures.

Assessment: Regular monitoring of wound healing, infection rates, patient comfort, and function, such as activities of ADL participation.

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BOLSTER DRESSING APPLICATION

The established method of attaching the bolster dressing uses multiple sewn tie-over sutures. This technique involves the placement of many paired, interrupted sutures on opposite sides of the bolster that are then tied, two at a time, to one another over the dressing.

Xeroform has demonstrated rapid re-epithelialization, whereas also being easy to use, resistant to infection, and the most cost-effective materials



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RESULTS

Healing Time: Bolster dressings significantly reduced healing time compared to traditional dressings, with a higher rate of skin graft take.

Infection Rates: The dressing is secure, and its protective nature lowers the incidence of infections.

Patient Comfort: High levels of patient comfort were reported, with reduced pain.

Function and Quality of Life: Improved engagement in activities of daily living without the compromise of immobilization with therapy and resumed functional mobility.

Wound care: Ease with wound care and take down with nursing staff due to sewn bolster.

DISCUSSION

Advantages: Enhanced wound stability, reduced shear forces, reduced hematoma/seroma formation, and improved healing environment.

Challenges: Initial application complexity and the need for training healthcare professionals in the technique.

Recommendations: Adoption of bolster dressings in standard burn care protocols, emphasizing training and education.

CONCLUSIONS

Bolster dressings offer a promising alternative to traditional burn wound care methods, demonstrating significant improvements in patient outcomes. Continued study and clinical application are essential to validate these findings further and optimize burn care practices.

