An Innovative All-in-One Negative Pressure Dressing for Simple, Effective Wound Care: A Three Patient Case Series

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Introduction

Negative pressure wound therapy (NPWT) is widely recognized for its efficacy in managing complex wounds, yet traditional systems often present challenges due to their bulkiness and complexity. These factors can hinder patient comfort and complicate discharge planning, particularly in home care settings. This case series introduces an innovative all-in-one NPWT dressing designed to simplify application, enhance comfort, and reduce waste.

Methods

This study involved a three-patient case series where the new all-inone NPWT dressing' was applied to various wound types, including surgical dehiscence, pressure injuries, and a surgically opened abscess. The dressing's design allows for easy application and extended wear time while being compatible with different pump types. Patient outcomes were assessed through caregiver feedback and clinical observations regarding comfort, usability, and wound healing progression.

Results

Across the three cases, patients reported significant improvements in comfort and ease of use compared to traditional NPWT systems. Caregivers noted reduced burden during dressing changes, which were less frequent due to the dressing's extended wear capabilities. Wound healing outcomes were favorable, with all patients demonstrating positive progress by the end of the treatment period.

Discussion

The findings from this case series suggest that the innovative all-in-one NPWT dressing effectively addresses many limitations associated with traditional NPWT systems. By simplifying the application process and enhancing patient comfort, this dressing promotes better adherence to treatment protocols and supports sustainable wound care practices. Its versatility makes it suitable for both clinical and home environments, aligning with patient-centered care principles and improving discharge planning efficiency. Further studies could expand on these results to solidify its role in wound management protocols.

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2 dressing changes



Abdominal surgical incision dehiscence

12 days of therapy







1 dressing change



Abscess surgically opened

7 days of therapy









Discharged

Pressure injury