

Non-Viable Tissue Decrease using a Charged Fiber Dressing with Silver in Acute Care Setting: A Single Center Review

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BACKGROUND

In acute care settings, treating non-viable tissue (NVT) in wounds is challenging due to the medical complexity of patients and limitations in performing sharp debridement, which may not be appropriate for all individuals, especially those on blood thinners. Effective management often involves specialized techniques such as sharp, enzymatic, or autolytic debridement; however, the scope of practice for registered nurses may restrict the use of sharp debridement. In this context, a 725-bed acute care hospital evaluated the effectiveness of a highly charged fiber dressing with silver aimed at facilitating the removal of NVT.

CURRENT STATE

Highly Charged Fiber Dressing (HCFD) with silver (Ag) is a specialized dressing designed to remove slough, absorb exudate, while providing antimicrobial barrier protection. It has been shown to reduce inflammation and pain, creating an optimal environment for healing.

DATA

A retrospective review was conducted on 12 patients who used HCFD with silver for wound treatment. The CWOC nurses independently evaluated each patient at the start and end of therapy for the percentage of NVT. The variables evaluated were length of therapy (LOT), percentage NVT at the start of therapy, NVT at the end of treatment, wound type, and wound size.

	Percentage NVT at Therapy Start	Length of Therapy (LOT)	Percentage NVT at Therapy End
All Wounds	66%; range (15-100)	9 days; range (3-14)	30%; range (0-85)
Pressure Injuries	79%	9 days	30%
Venous Leg Ulcers	52%	9 days	35%
Wounds with greater than 50% NVT at start of therapy	78%	9 days	34%

RESULTS

Of the 12 patients treated with HCFD with Ag, 5 had pressure injuries (PI), 3 had Venous Leg Ulcers (VLU), and 4 had other conditions (traumatic, skin tear, infectious). The average wound area was 51 cm² with a range of 0.3-255cm².

The average percentage of NVT at the start, LOT, and the average rate of NVT at the end of therapy were calculated. Additionally, wounds with greater than 50% NVT were evaluated separately.

FOLLOW-UP ACTIONS

This small sample highlights the potential benefits of HCFD with silver for managing NVT in acute care patients when surgical debridement is not possible. Prior European studies—including an RCT on the silver-free product and an observational study on the silver dressing—demonstrated desloughing effects consistent with our US observations. Larger US-based studies are recommended to support patient selection and cost analysis.



Difference of 14 days of CFD with Ag



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