

## Evaluation of a Cyanoacrylate Dressing to Treat Skin Tears in the Acute Care Population

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**Purpose and Rationale:** The management of skin tears in the acute care setting is a common problem and an area of concern. Skin tear incidence rate in the elderly range from 0.9 to 2.5 per person/year<sup>1</sup>, though reported rates are primarily derived from the long-term care (LTC) population. The literature reports only one acute care incidence range of 14-24%.<sup>2</sup>

**Research Question:** Is a cyanoacrylate dressing a viable option to treat skin tears in the acute care setting?

**Synthesis of Review of Literature:** Optimal methods to treat skin tears vary in the literature.<sup>2,3</sup> Cyanoacrylate dressings have been used successfully in LTC<sup>4</sup> but its utility has not yet been examined in acute care.

**Methods/Procedures:** Using a convenience sample, topical cyanoacrylate\* dressing was applied to thirty patients with Payne-Martin Category I- III skin tears on one Medical-Surgical unit. Patients were assessed daily for wound pain, total number of cyanoacrylate dressing applications, and wound complications. Nurse satisfaction with this method of treatment was also examined. Cost comparison with the usual method of treating skin tears on this unit (normal saline irrigation followed by impregnated petrolatum gauze\*\* followed by non-adherent gauze pad and rolled gauze to secure the primary dressing to the extremity daily) was additionally performed.

**Results:** Average length of stay on this Medical-surgical unit was 4.5 days. The skin tear incidence rate 3.8 % (compared to literature data of 9.9%). Cyanoacrylate dressings required one-time application for the majority of patients. The 13.3% incidence of reapplication was correlated to the category and location of the skin tears. The application of the cyanoacrylate dressing required significantly less dressing costs and usage time, positively impacting labor and resource utilization. Nurse satisfaction with cyanoacrylate usage was very high. There were no wound complications and wound pain was minimal. Limitations to study for complete healing were due to short length of stays on this unit. Those patients that were followed for a week or more showed complete healing of the skin tear.

**Discussion/Application to Practice:** Building an evidence-based treatment regimen for skin tears in the acute care setting is important. The use of cyanoacrylate dressings is a viable option to treat Payne-Martin I-III skin tears in an acute care setting. The cost benefit coupled with nurse satisfaction provides additional support for this treatment method. The treatment of skin tears using a cyanoacrylate dressing is now the first option in our acute care facility.