

Hemostatic effect of vivostat patient-derived fibrin sealant on split-thickness skin graft donor sites.

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Publication Date: 2003

Abstract:

Topical hemostatic agents are used frequently to control bleeding of skin graft donor sites. In this study, the hemostatic properties of Vivostat (Vivolution A/S, Birkerød, Denmark) patient-derived fibrin sealant were compared with a control group of spray thrombin solution, which is considered an industry standard for topical hemostasis. Treatments were applied simultaneously to two randomly chosen halves of a single split-thickness single donor site in patients in five United States surgical centers. The time to achieve satisfactory hemostasis (≤ 10 min) was estimated on each half of the wound as the time at which active bleeding had stopped and the wound was suitable for application of a surgical dressing. The time to hemostasis of wounds treated with Vivostat (Vivolution A/S) patient-derived sealant was significantly shorter in comparison with wounds treated with thrombin solution (medians: Vivostat, 31 seconds; thrombin, 58 seconds; $p = 0.0012$). No abnormalities in wound healing were reported for either treatment site 1 week after the operation. Vivostat (Vivolution A/S) sealant is a more rapidly effective topical hemostatic agent than thrombin on split-thickness skin graft donor sites.