

Application of single-donor fibrin glue to burns.

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Abstract:

Early tangential excision and immediate grafting of the burn-injured patient has been shown to be effective. Along with the use of this technique, however, comes the potential for significant blood loss, prolonged operative time, and partial loss of graft due to underlying hematoma formation. Based on experience using a pooled fibrinogen preparation. European and Japanese surgeons have provided evidence for the positive hemostatic and skin transplant fixation effects of fibrin glue. This commercial preparation, however, has not been approved by the U.S. Food and Drug Administration for use in the United States because of high risk of hepatitis and HIV transmission. Using a method of preparing highly concentrated fibrinogen utilizing standard blood bank techniques developed at the University of Virginia, we have applied single-donor fibrin glue as an adjunct in the early excision and grafting of 26 patients. Since we have been using fibrin glue, we have noted a marked reduction in operative blood loss and time involved in obtaining hemostasis. Additionally, we have found the application of the grafts to be facilitated by the 'stickiness' of the recipient bed. In follow-up, grafts applied utilizing the fibrin glue technique have proceeded to uncomplicated wound healing with an overall 98% graft take.