Fibrin adhesive derived from snake venom in periodontal surgery.

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Abstract:

Background: A new fibrin adhesive made of buffalo plasma-derived fibrinogen and a thrombin-like enzyme obtained from snake venom was evaluated in this case series with regard to its applicability in periodontal surgery. Free gingival grafts that were sutured (control group) were compared to others immobilized through the use of the adhesive (experimental group). Methods: The grafts were carried out in contralateral mandibular bicuspids of 15 patients so that each subject received one treatment of each type. The analysis included measurements of probing and vertical dimension of the grafts and photographic follow-up for 90 days. The patients answered a questionnaire concerning postoperative signs and symptoms. Results: The decrease in the vertical dimension of the grafts was significant during the first 30 days and more dramatic for the control group. Probing depth and attachment level presented statistically significant decreases for both groups. The grafts of the experimental group presented better appearance during the first 14 postoperative days. Pain was observed more often in the control group. Conclusions: Within the limits of the present study, it is suggested that the alternative fibrin adhesive tested may represent an alternative to sutures in periodontal surgery. Nevertheless, randomized clinical trials should be performed to evaluate the clinical advantages and disadvantages of the material.