Effects of fibrin glue on wound healing in oral cavity.

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Abstract:

Objectives. Healing after oral cavity surgery may be problematic in some cases, because it is a contaminated cavity. The purpose of this investigation was to evaluate the effect of fibrin glue on healing after surgical procedures in the oral cavity. Methods. Forty-two Sprague-Dawley rats were used at this study, 24 in study (Group 1) and 18 in control (Group 2) groups. First molars of the rats were extracted with some cortical bone. The exposed cavities were filled with fibrin glue after hemostasis in study group but 5/0 silk suture was used in control group. The rats were sacrified after two, four and six weeks and histologic analysis was performed. Results. Healing was better in the study group. Foreign body reaction was lower in Group 1 (1/24, 4.1%) than Group 2 (6/18, 33.3%) (p<0.05). Also abcess formation scores were better in Group 1 (3/24, 12.5%) than Group 2 (10/18, 55.5%) (p<0.008, chi²=7). The last significant difference was on necrosis and better results were obtained in Group 1 (2/24, 8.3%) than Group 2 (10/18, 55.5%) (p<0.001, chi²=11.24). Conclusions. The use of fibrin glue on wound healing in the oral cavity has a positive effect when compared with traditional suture techniques. © 2003 Elsevier Ltd. All rights reserved.