

A new method of covering mucosal defect after oral cancer resection - A combination of polyglycolic acid (PGA) sheet and sprayed fibrin glue.

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Abstract:

Introduction: In a treatment for T1-2 oral cancer, resection without reconstruction is simple and useful method. However, it sometimes causes postoperative bleeding and pain. Polyglycolic acid (PGA) sheet (NEOVEIL, GUNZE Ltd.) is known as absorbable material for the Regenerative Medicine. In 2007, for preventing bleeding and pain we developed a new method of covering a mucosal defect after resection of not so extensive oral cancer with PGA sheet combined with fibrin glue sprayed. After complete hemostasis, the defect is covered with PGA sheet trimmed in a size smaller than the area. To secure the sheet, fibrin glue is sprayed from 15 to 20 cm distance. After surgery, oral intake is avoided for seven days to make PGA sheet glue to the wound. The purpose of the study is to prove the usefulness of the method. **Methods:** Retrospective chart review was performed on the 63 patients of oral cancer for whom the author (R.A.) has conducted the method in Kyoto University from 2007 to 2009 and Kyoto Medical Center from 2009 to 2010. Data was collected on tumor site, postoperative bleeding, requirement of NSAID for postoperative pain and the presence period of PGA sheet. **Results:** The primary tumor was located in tongue in 27 patients, lower gingiva in 13, buccal mucosa in 10, upper gingiva in 8, hard palate in 5 and oral floor in 4. Postoperative bleeding was observed in 10 cases, which was controlled by local compression in three, by electric coagulator in two, and five cases stopped spontaneously. About postoperative pain, 23 patients did not need NSAID at all, 17 patients needed NSAID less than once a day, and 23 patients more than once a day. PGA sheet remained for 0-57 days (average 22 days). The early

loss for less than 1 week was only 3 cases. Discussion: A combination of PGA sheet and sprayed fibrin glue is easily, safety and useful method of covering mucosal defect in oral cavity, and it must contribute to great improvement in results of oral cancer therapy.