Clinical evaluations of autologous fibrin glue and polyglycolic acid

sheets as oral surgical wound coverings after partial glossectomy.

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Abstract:

Polyglycolic acid (PGA) sheets and commercial fibrin glue are commonly used to cover open wound

surfaces in oral surgery. Compared to commercial fibrin glue composed of pooled allogeneic blood,

autologous fibrin glue is less expensive and poses lower risks of viral infection and allergic reaction.

Here, we evaluated postoperative pain, scar contracture, ingestion, tongue dyskinesia, and

postoperative bleeding in 24 patients who underwent partial glossectomy plus the application of a

PGA sheet and an autologous fibrin glue covering (autologous group) versus 11 patients in whom a

PGA sheet and commercial fibrin glue were used (allogeneic group). The evaluated clinical

measures were nearly identical in both groups. Remarkable wound surface granulation was

recognized in two cases in the autologous group. No complications were observed in either group.

including viral infection or allergic reaction. Abnormal postoperative bleeding in the wound region

was observed in one case in the allogeneic group. Coagulation and adhesion of the autologous

fibrin glue were equivalent to those of conventional therapy with a PGA sheet and commercial fibrin

glue. Thus, our results show that covering wounds with autologous fibrin glue and PGA sheets may

help avoid the risks of viral infection and allergic reaction in partial glossectomy cases.

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