

Sealing effect of fibrin adhesive by various method on protection of air leakage in lung surgery. [Japanese]

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Abstract:

We used fibrin adhesive for the treatment of pulmonary air leak after pneumonectomy to sealing effect of fibrin adhesive which was classified by application and obtained the following results. 98 patients with pulmonary air leak were randomly allocated to the double layer group and spray group. The following were investigated between the double layer group and spray group. 1) size and dose of fibrin adhesive, 2) airway pressure where pulmonary air leak was observed before and after application, 3) duration of postoperative pulmonary air leak, 4) degree of postoperative pulmonary air leak, and 5) postoperative complication. The dose of fibrin adhesives was significantly smaller, the mean duration of postoperative pulmonary air leak was significantly shorter and the degree of postoperative pulmonary air leak was significantly more slight in the spray group than in the double layer group. In addition, the sutured part was examined before and after application of fibrin adhesives with a scanning electron microscope. Fibrin nets were formed more uniformly by the spray method than by the double layer method. From these investigations it is concluded that since the appliance for the spray method is improved and easily used and fibrin nets are formed uniformly by this method, the spray method is useful for the prophylaxis of pulmonary air leak.