Effectiveness of fibrin glue in preventing postoperative pulmonary air leakage. [Japanese]

Authors: Omote Y., Kubo Y.

Publication Date: 1994

Abstract:

The authors investigated the effectiveness of fibrin glue in preventing pulmonary air leakage after

lung surgery. We first examined 29 patients who underwent pulmonary resection without the use of

fibrin glue. On the basis of preoperative spirometry data, these patients were divided into normal

respiratory function and poor function groups (%VC < 80% and/or FEV1.0% < 70%), and the

duration of postoperative pulmonary air leakage in each group was studied. The duration was 2.2 +/-

1.4 days (mean  $\pm$ - S.D, n = 18) in the normal group and 5.2  $\pm$ - 4.3 days (mean  $\pm$ - S.D, n = 11) in

the poor respiratory function group. The latter values were significantly greater than the former (p <

0.05, unpaired t-test). Then we examined seven patients who underwent lung surgery with the use

of fibrin glue. We found that in three patients with normal respiratory function, the air leakage

disappeared within one day, and in four patients who had poor respiratory function, the air leakage

disappeared in three days. In both respiratory function groups, the air leakage seemed to disappear

more quickly with the use of fibrin glue. These results suggest that fibrin glue is effective in

preventing pulmonary air leakage.