

Wound healing effect of fibrin adhesive agent in bronchial stump after pulmonary lobectomy. [Japanese]

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Abstract:

The wound healing effect of fibrin adhesive agent (Berioplast P) on bronchial stump after lobectomy was examined by using piglets. The piglets were divided into three experimental groups. In group A, the bronchial stumps were closed by interrupted sutures. In group B, the bronchial stumps were closed by interrupted sutures added to Berioplast P. In group C, the bronchial stumps were closed by interrupted sutures added to Berioplast P plus OK-432. In all three groups, we studied the macroscopic findings, histological findings, leakage pressure, and amount of hydroxyproline. In groups B and C, collagen fiber production was rapid, the leakage pressure was great, and the amount of hydroxyproline was large. In group C, many inflammatory cells appeared in the early stage after lobectomy. In all groups, all parameters were the same 3 weeks after lobectomy. These results suggest that Berioplast P was effective in accelerating bronchial stump healing. It is concluded that bronchopleural fistulas originating in the early stage after lobectomy may be prevented by methods of employing Berioplast P.