

The influence of fibronectin on the fibrosing of a nerve anastomosis in the rat.

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Abstract:

Although the fibrin adhesion enjoys increasing success in many areas of surgery, it has not, however, become fully established in nerve anastomosis. It was in this area particularly that significant advantages were expected, especially by the avoidance of suture granulomas. As the fibrin clot dissolved prematurely, however, and dehiscences ensued, antifibrinolytic substances had to be added to the adhesive. Fibroses occurred frequently as a result, which to data encumber nerve adhesive. We examined fibronectin for its fibrosis-inducing effect, comparing both presently available fibrin adhesive systems, because one contained up to 5 times more fibronectin per milliliter than the other. On the basis of a test grouping using 100 and 1000 KIU aprotinin/ml, we were able to establish that fibronectin in fibrin adhesives possesses a fibrosis-promoting effect.