Intraluminal application of fibrinogen adhesive by the example of the

endarterectomised pig aorta.

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Abstract:

In vascular surgery, the method of gluing of tissue with highly concentrated fibrinogen has been

used up to now for sealing sutures, especially in clotting disorders, for anastomosis of arteries alone

or in combination with sutures, especially in the microsurgical field, for sealing of prostheses, and for

plugging fistulating lymphatic vessels with more or less success. The danger of thrombotic vascular

occlusion in intravascular application has been pointed out. This is also clearly noted on the

proprietary pack. However, experience with preclotting of Dacron prostheses indicates that specific

application of a thin layer of fibrin glue should be possible. The possibility of intravascular glue

application was investigated in animal experiments. Studied were moderately large arteries

(diameter about 5 mm), the reconstruction of which occurs frequently in vascular surgery. The

following questions were of interest: 1. Does intraluminal fibrin gluing lead to thrombotic vascular

occlusion? 2. Does intraluminal fibrin gluing have an influence on the healing or intimal regeneration

after limted endarterectomy?