

Vasovasostomy in rabbits using fibrin adhesive prepared from a single human source.

Authors: Niederberger C., Ross L.S., Mackenzie Jr. B., Schacht M.J., Cho Y.

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Abstract:

We were interested in determining whether fibrin glue derived from a single human source could be used effectively to produce a sutureless vasovasostomy in the rabbit model. Fifteen rabbits were divided into two groups (7 control, 8 experimental) and underwent vasal transection and reanastomosis by conventional microsurgical suture techniques (control group) and sutureless anastomosis using single source fibrin glue (experimental group). The patency and tensile strength of the anastomoses were compared at four weeks and the anastomotic sites underwent histologic examination. This study demonstrated that a vasovasal anastomosis in the rabbit could be achieved using human single source fibrin glue with patency equivalent to a standard sutured anastomosis. The tensile strength of the glued anastomosis at four weeks was greater than the tensile strength of the sutured anastomosis.