

# **Fibrin glue for anastomosis of the fallopian tube - Morphology.**

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## **Abstract:**

In a morphological study fibrin glued tubal anastomoses were compared with classical anastomoses using microsutures. In the isthmic-isthmic anastomoses, whether they were glued or sutured, the opposition of the folds and the continuity of the tubal wall were good. Scanning electron microscope studies of Fallopian tubes subjected to anastomosis using fibrin glue or microsurgical sutures showed a break in the fold structure regardless of the technique used, with formation of polyp-like and tuborous structures in some of the anastomoses in the ampullary region. In one case of an ampullar-ampullar anastomosis with fibrin glue, formation of a fistula was observed and in another case of the same type of anastomosis a hydrosalpinx developed as the consequence of intratubal adhesions and stenosis. In glued anastomoses in particular, intraluminal fibrin deposits were observed. Otherwise our scanning and transmission electron microscope investigations of the region of the anastomoses revealed a normal cell picture with abundant cilia-bearing, structurally unremarkable cells. Fibrin glueing can thus be regarded as a possible alternative to the conventional microsurgical suturing technique for the construction of anastomoses in the isthmic segment of the tube. In the case of wide-lumen ampullary anastomoses, however, the danger of fistula formation, dehiscence, development of intraluminal adhesions and stenosis must be regarded as increased. Fibrin glueing also does not appear to be appropriate for anastomoses requiring approximation of differing luminal widths.