

Effect of Fibrin Glue on the Incidence of Surgical Complications After Living-Related-Donor Kidney Transplantation: Results of a Randomized Clinical Trial.

Authors: Fuentes-Orozco C, Gonzalez-Mercado S, Sandoval-Sandoval JM, Valdespino-Mejia C, Gonzalez-Gonzalez E, Ramirez-Robles JN, Gomez-Navarro B, Davalos-Delgadillo BE, Marquez-Leano L, Ramirez-Arce A, Andalon-Duenas E, Espinosa-Partida A, Macias-Amezcu MD, Gonzalez-Ojeda A

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Abstract:

BACKGROUND The incidence of surgical complications after kidney transplantation ranges from 10-25%. The purpose of this study was to evaluate if the application of fibrin glue as a preventive agent reduces surgical morbidity after a living-related-donor kidney transplantation. **MATERIAL AND METHODS** A controlled clinical trial involving 78 recipients randomly assigned to receive fibrin glue and 79 in the control group without the application of fibrin glue. Patients were followed for six months after surgery. **RESULTS** The average ages were 24.8+/-9.4 and 27.4+/-11.3 years in the control and study groups, respectively ($p=0.11$). Individual morbidities, such as urologic, lymphatic, vascular, and wound complications, were not statistically different between groups; however, the total number of surgical complications observed were in five patients in the study group and 16 patients in the control group. This difference was statistically significant ($p<0.01$, relative risk 0.44, 95% CI 0.20-0.97). There was no mortality or adverse reaction to fibrin glue. One kidney graft was lost because of uncontrollable bleeding secondary to tearing of the renal capsule. The incidence of early medical complications was similar between groups. **CONCLUSIONS** Applications of the biological adhesive reduced the incidence of surgical complications.