

Fibrin sealant tissue adhesive--review and update. [Review] [200 refs]

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Abstract:

The field of surgical tissue adhesives is rapidly developing, with multiple products now available. Fibrin sealant, the first widely available tissue adhesive, continues to be used in traditional as well as in new and creative ways. The product is now fully mature as a hemostatic agent in cardiac, liver, and spleen surgery. It is also useful as a sealant in a variety of clinical applications, including procedures such as colonic anastomosis, as well as in seroma prevention following soft tissue dissection. Newer uses such as reduced suture vascular and intestinal anastomosis, fistula closure, surgery in patients with hemophilia, and laparoscopic/endoscopic procedures are being studied in both laboratory and clinical settings. The most recent additions to the capabilities of fibrin sealant include the use of this tissue adhesive as a slow-release drug delivery system and as a substrate for cellular growth and tissue engineering. This article will review the basis of fibrin sealant effectiveness and will also cover the recent developments in the rapidly evolving employment of this material. [References: 200]