Fibrin sealant as tissue glue: Preliminary experience in complex genital reconstructive surgery.

Authors: Morris M.S., Morey A.F., Stackhouse D.A., Santucci R.A.

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Abstract:

Objectives: To report the outcomes of graft take and wound healing in the first reported series in which fibrin sealant was used as a tissue glue in the reconstruction of complex genital skin loss. Methods: Between July 2001 and July 2005, 18 men requiring complex genital reconstruction underwent repair by two surgeons at our medical centers. Skin graft reconstruction was required in 6 men. Complete scrotal disassembly with extensive scrotal or thigh flaps was required for reconstruction of 12 others. In the skin graft cases, a thin layer of dilute fibrin sealant was sprayed on the recipient site immediately before graft apposition. In flap cases, fibrin sealant was injected beneath the flap to promote tissue adherence and prevent fluid accumulation. All wounds were followed up postoperatively and observed for evidence of graft take, seroma or hematoma formation, drainage, and infection. Results: The 6 skin graft patients required a total of nine split-thickness skin grafts, all of which had 100% take. Of the 12 patients requiring flap reconstruction, 11 had excellent results. One flap case had a partial wound breakdown, but this reconstruction was performed immediately subsequent to a significant debridement and irrigation procedure in the same setting. Overall, 17 (94.4%) of 18 patients had no wound infection, seroma, hematoma, or other complications. Conclusions: Fibrin sealant performs very well as a tissue glue and appears to be a useful adjunct in cases of complex genital skin loss reconstruction.