Skin Grafting for the Treatment of Enterocutaneous Fistulas

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Abstract

Background: Although skin grafting is employed to treat abdominal wounds, there is minimal literature reviewing the use of skin grafting to treat enterocutaneous fistulas. Enterocutaneous fistulas principally result from complications after abdominal surgery. Postoperative enterocutaneous fistulas occur as a complication in 0.8-2% of abdominal surgeries[1]. Abdominal fistulas can affect quality of life and can contribute to prolonged hospital stays, resulting in increased expenses. The mortality rate ranges from 5-37%[1]. Despite the numerous advancements in surgical techniques over recent years, the occurrence of fistulas has remained fairly constant.

Methods: In this paper, we review our experience with the use of acellular dermal matrices and skin grafting in the treatment of enterocutaneous fistfuls in three patients.

Results: The use of a dermal matrix and fibrin glue prevents contamination from the enteric fluid from the fistula. Additionally this method prevents the bowel from desiccation and touching surrounding dressings. Fibrin sealants, in combination with a dermal matrix, allow for a chance of spontaneous closure, with nothing lost if unsuccessful.

Conclusions: Our results support the use of skin grafting and fibrin glue as a successful method of treating enterocutaneous fistulas and indicate that the acellular dermal matrix is able to be incorporated into the wound and the fibrin glue secures it and closes the fistula.

References

1. Wainstein, D. E., D. Berkowski, E. Fernandez, D. Gonzalez and O. Chara (2008). "Treatment of high-output enterocutaneous fistulas with a vacuum-compaction device. A ten-year experience." World Journal of Surgery 32(3): 430-435.

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