The effect of fibrin glue on skin grafts in infected sites.

Authors: Jabs AD Jr, Wider TM, DeBellis J, Hugo NE

Publication Date: 1992

Abstract:

Fibrin bonding of skin grafts to wounds is an essential part of the graft-adherence process. Bacteria, in concentrations greater than 10(5)/gm of tissue, are associated with graft failure. Sixty-five rats were randomly divided into three groups, dorsal split-thickness skin grafts were harvested, and the sites were inoculated with Staphylococcus aureus. After incubation, each wound was quantitatively biopsied and treated with saline, fibrin glue with aprotinin, or fibrin glue alone. We found that the addition of commercially available fibrin glue with or without the antifibrinolytic agent aprotinin is capable of restoring graft adherence to normal levels in graft sites infected with greater than 10(5) bacteria/gm of tissue. Fibrin glue may have potential for increasing skin-graft take in the clinical situation where the graft bed is infected.