Cultured autologous keratinocytes suspended in fibrin glue (KFGS) with allogenic overgraft for definitive burn wound coverage.

Authors: Stark G.B., Kaiser H.W., Horch R., Kopp J., Spilker G.

Publication Date: 1995

Abstract:

In a patient with burns of 88% TBSA autologous cultured keratinocyte fibrin glue suspension (KFGS) overgrafted with fresh split thickness allogenic skin was used as definitive wound coverage after epifascial debridement and temporary allogenic closure. A total of 22% TBSA were closed in this way including a complete leg except the foot. For comparison, the contralateral leg was covered with conventional autologous sheet grafts (CEA). Histology revealed a layered squamous epithelium, and evidence of at least partial integration of allogenic dermis including the formation of a well-organized rete structure even after deep necretomy. Besides the rapid stable closure and good skin quality, the new technique has the advantages of early availability, simple handling, easy repetition, and the transfer of actively proliferating epidermal cells. This is the first case proving that KFGS with allogenic overgrafts leads to permanent epithelialization of large epifascial wounds. The technique compared favorably with CEA with regard to availability, handling, and stability.