

CULTURED EPITHELIAL AUTOGRAFT (CEA) - THREE DECADES LATER (046)

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Methods for handling burn wounds have changed in recent decades and increasingly aggressive surgical approach with early tangential excision and wound closure is being applied. Split-thickness skin (STSG) autografts are the “gold standard” for burn wound closure and remain the mainstay of treatment to provide permanent wound coverage and achieve healing. In some massively burned patients, however, the burns are so extensive that donor site availability is limited. Fortunately, considerable progress has been made in the culture of human keratinocytes and it is now possible to obtain large amounts of cultured epithelium from a small skin biopsy within 3-4 weeks. Questions related to optimal cell type for culture, culture techniques, transplantation of confluent sheets or non-confluent cells, immediate and late final take, carrier and transfer modality, as well as final outcome, ability to generate an epithelium after transplantation, and scar quality are still not fully answered. Progress accomplished since Reinwald and Green first described their keratinocyte culture technique is reviewed.