



INITIAL EXPERIENCE WITH THE FIRST APPLICATION OF ALLOGENIC SKIN GRAFTS FOR ACUTE BURNS IN CROATIA

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Objectives

Authors' very first experience with application of glycerol preserved allografts (GPAs) in acute burn treatment applied in a 7-year-old boy with 93% TBSA IIIrd degree flame burn.

Methods

After excision of the necrotic tissue during the initial 4 days, INTEGRA DRT was applied on the extremities. Given the fact that the take rate of INTEGRA DRT was around 30%, allogenic skin grafts were imported from the Banc de Sang i Teixits - Barcelona and grafted onto the wound bed, 14 days after the patient's admission.

Donor sites on the scalp and the foot were covered with amniotic membranes (AM) from the local Tissue Bank. During 4 months of hospitalization, GPAs were applied 6 times (7,000 cm²).



• Early covering of the patient: amniotic membrane grafts were put on donor sites (the head) and the leg (A,B); glycerolized skin allografts were put on burned sites (C,D).

Results

AM promoted faster healing in small areas of IInd degree burns. Cadaveric skin grafts enabled the preservation of the wound bed for subsequent autologous skin grafting combined with cultured epithelial autografts (CEAs).

CEAs were applied in preconfluent phase with two - component fibrin glue (Tisseel, Baxter). The take rate after wound bed conditioning with allogenic skin was around 90%. An episode of mold infection occurred on the area covered with allogenic skin what prompted immediate removal of the grafts and initiation of antifungal therapy.



• Application of cultured autologous keratinocytes (CEAs) in fibrin glue with EasySpray, Baxter device. CEA were applied 5 times and combined when available, with meshed autologous skin (E,F).

Discussion

Allogenic skin grafts provided a beneficial temporary wound dressing and enabled a very satisfying take rate of autologous skin grafts. Unfortunately, six months after the admission, when burns were healed, the patient died out of acute heart failure.