

Hautersatzverfahren in der Plastischen Chirurgie

1. Deutsche Gesellschaft für Verbrennungsmedizin (2017) Jahresbericht 2017 Verbrennungsmedizin
2. Vogt PM, Mailänder P, Jostkleigrewe F, Reichert B, Adams HA (2007) Die Zentren für Schwerebrandverletzte in der Bundesrepublik Deutschland – Versorgungsstrukturen und Bedarfszentren für schwer verbrannte Patienten in Deutschland: Management und Bedarf. *Chirurg Suppl*: 411–413
3. Vogt PM, Kolokythas P, Niederbichler A, Knobloch K, Reimers K, Choi CY (2007) Innovative Wundtherapie und Hautersatz bei Verbrennungen. *Chirurg* 78: 335–342
4. Xiao J, Chai BR, Kong FY, Peng SG, Xu H, Wang CG, Suo HB, Huang DQ (1992) Increased survival rate in patients with massive burns. *Burns* 18: 401–404
5. Finnerty CC, Capek KD, Voigt C et al (2017) The P50 Research Center in perioperative sciences: How the investment by the National Institute of General Medical Sciences in team science has reduced postburn mortality. *J Trauma Acute Care Surg* 83: 532–542
6. Haynes BW (1969) Early excision and grafting in third degree burns. *Ann Surg* 169: 736–747
7. Hendren WH, Constable JD, Zawacki BE (1968) Early partial excision of major burns in children. *J Pediatr Surg* 3:445–464
8. Pierer H (1966) Primäre Exzision bei Verbrennungen. *Klin Med Österr Z Wiss Prakt Med* 21: 377–380
9. Alrubaiy L, Al-Rubaiy KK (2009) Skin substitutes: a brief review of types and clinical applications. *Oman Med J* 24: 4–6
10. Gibson T, Medawar PB (1943) The fate of skin homografts in man. *J Anat* 77: 299–310
11. Baronio G (1804) *Degli Innessi Animali. Stamperia e Fonderia del Genio, Milano*
12. Jay V (1999) This month in history. *J R Soc Med* 92: 548–548
13. Alexander JW, MacMillan BG, Law E, Kittur DS (1981) Treatment of severe burns with widely meshed skin autograft and meshed skin allograft overlay. *J Trauma* 21: 433–438
14. Rowan MP, Cancio LC, Elster EA, Burmeister DM, Rose LF, Natesan S, Chan RK, Christy RJ, Chung KK (2015) Burn wound healing and treatment: review and advancements. *Crit Care Nurs Clin North Am* 30: 423–430
15. Rheinwald JG, Green H (1975) Formation of a keratinizing epithelium in culture by a cloned cell line derived from a teratoma. *Cell* 6: 317–330
16. Rheinwald JG, Green H (1975) Serial cultivation of strains of human epidermal keratinocytes: the formation of keratinizing colonies from single cells. *Cell* 6: 331–343
17. Wood FM, Giles N, Stevenson A, Rea S, Fear M (2012) Characterisation of the cell suspension harvested from the dermal epidermal junction using a ReCell® kit. *Burns* 38: 44–51
18. Boyce ST, Lalley AL (2018) Tissue engineering of skin and regenerative medicine for wound care. *Burns Trauma* 6: 4
19. Gravante G, Di Fede MC, Araco A, Grimaldi M, De Angelis B, Arpino A, Cervelli V, Montone A (2007) A randomized trial comparing ReCell system of epidermal cells delivery versus classic skin grafts for the treatment of deep partial thickness burns. *Burns* 33: 966–972
20. Gallico GG, O'Connor NE, Compton CC, Kehinde O, Green H (1984) Permanent coverage of large burn wounds with autologous cultured human epithelium. *N Engl J Med* 311: 448–451
21. Meuli M, Hartmann-Fritsch F, Hüging M et al (2019) A cultured autologous dermo-epidermal skin substitute for full-thickness skin defects. *Plast Reconstr Surg* 144: 188–198
22. Esteban-Vives R, Young MT, Zhu T, Beiriger J, Pekor C, Ziembicki J, Corcos A, Rubin P, Gerlach JC (2016) Calculations for reproducible autologous skin cell-spray grafting. *Burns* 42: 1756–1765
23. Brent L, Medawar PB (1967) Cellular Immunity and the homograft reaction. *Br Med Bull* 23: 55–59
24. Murphy KM, Travers P, Walport M (2009) *Janeway Immunologie*, 7th edition
25. Opelz G, Wujciak T (1994) The influence of HLA compatibility on graft survival after heart transplantation. The Collaborative Transplant Study. *N Engl J Med* 330: 816–819
26. Arakelov A, Lakkis FG (2000) The alloimmune response and effector mechanisms of allograft rejection. *Semin Nephrol* 20: 95–102
27. Opelz G (1994) Effect of the maintenance immunosuppressive drug regimen on kidney transplant outcome. *Transplantation* 58: 443–446
28. Weimer R, Melk A, Daniel V, Friemann S, Padberg W, Opelz G (2000) Switch from cyclosporine A to tacrolimus in renal transplant recipients: impact on Th1, Th2, and monokine responses. *Hum Immunol* 61: 884–897
29. Murray JE (1992) Human organ transplantation: background and consequences. *Science* 256: 1411–1416
30. Manning J (2018) Sepsis in the burn patient. *Crit Care Nurs Clin North Am* 30: 423–430
31. Schlottmann F, Strauss S, Hake K, Vogt PM, Bucan V (2019) Down-regulation of MHC class I expression in human keratinocytes using viral vectors containing US11 gene of human cytomegalovirus and cultivation on bovine collagen-elastin matrix (Matriderm®): Potential approach for an immune-privileged skin substitute. *Int J Mol Sci* 20: 2056
32. Wang C, Zhang F, Lineaweaver WC (2020) Clinical applications of allograft skin in burn care. *Ann Plast Surg* 84: S158–S160

33. Schlottmann F, Strauß S, Ziesing S, Reineke C, Ipaktchi R, Weyand B, Krezdorn N, Vogt PM, Bucan V (2024) Organization of Hannover Skin Bank: Sterile culture and procurement protocols for viable cryopreserved allogeneic skin grafts of living donors. *Int Wound J* 21: e14374
34. Spence RJ, Ruas EJ (1986) The banking and clinical use of human skin allograft in trauma patients: clinical use of allograft skin. *Md Med J* 35: 205–212
35. Cronin H, Goldstein G (2013) Biologic skin substitutes and their applications in dermatology. *Dermatol Surg* 39: 30–34
36. Horch R, Stark GB, Kopp J, Spilker G (1994) Cologne Burn Centre experiences with glycerol-preserved allogeneic skin: Part I: Clinical experiences and histological findings (overgraft and sandwich technique). *Burns* 20 Suppl 1: S23–S26
37. Alam K, Jeffery SLA (2019) Acellular fish skin grafts for management of split thickness donor sites and partial thickness burns: A case series. *Mil Med* 184: 16–20
38. Hermans MHE (2014) Porcine xenografts vs. (cryopreserved) allografts in the management of partial thickness burns: Is there a clinical difference? *Burns* 40: 408–415
39. Lima Júnior EM, De Moraes Filho MO, Costa BA et al (2020) Innovative burn treatment using tilapia skin as a xenograft: A phase II randomized controlled trial. *J Burn Care Res* 41: 585–592
40. Halim AS, Khoo TL, Mohd Yusoff SJ (2010) Biologic and synthetic skin substitutes: An overview. *Indian J Plast Surg* 43: S23–S28
41. Schwarze H, Küntscher M, Uhlig C, Hierlemann H, Prantl L, Ottomann C, Hartmann B (2008) Suprathel, a new skin Substitute, in the management of partial-thickness burn wounds. *Ann Plast Surg* 60: 181–185
42. Böttcher-Haberzeth S, Biedermann T, Schiestl C, Hartmann-Fritsch F, Schneider J, Reichmann E, Meuli M (2012) Matriderm® 1 mm versus Integra® Single Layer 1.3 mm for one-step closure of full thickness skin defects: a comparative experimental study in rats. *Pediatr Surg Int* 28: 171–177
43. Dickson K, Lee KC, Abdulsalam A, Amirize E, Kankam HKN, ter Horst B, Gardiner F, Bamford A, Hejmadi RK, Moiemmen N (2023) A Histological and Clinical Study of MatriDerm® Use in Burn Reconstruction. *J Burn Care Res* 44: 1100–1109
44. De Vries HJ, Zeegelaar JE, Middelkoop E, Gijsbers G, Van Marle J, Wildevuur CH, Westerhof W (1995) Reduced wound contraction and scar formation in punch biopsy wounds. Native collagen dermal substitutes. A clinical study. *Br J Dermatol* 132: 690–697
45. Schlottmann F, Obed D, Bingöl AS, März V, Vogt PM, Krezdorn N (2022) Treatment of complex wounds with NovoSorb® diodegradable temporising matrix (BTM)—a retrospective analysis of clinical outcomes. *J Pers Med* 12: 2002
46. Li A, Dearman BL, Crompton KE, Moore TG, Greenwood JE (2009) Evaluation of a novel biodegradable polymer for the generation of a dermal matrix. *J Burn Care Res* 30: 717–728
47. Greenwood JE, Li A, Dearman BL, Moore TG (2010) Evaluation of NovoSorb novel biodegradable polymer for the generation of a dermal matrix. Part 2: in-vivo studies. *Wound Pract Res* 18: 24–34
48. Metcalfe AD, Ferguson MWJ (2007) Tissue engineering of replacement skin: the crossroads of biomaterials, wound healing, embryonic development, stem cells and regeneration. *J R Soc Interface* 4: 413–437
49. Killat J, Reimers K, Choi C, Jahn S, Vogt P, Radtke C (2013) Cultivation of keratinocytes and fibroblasts in a three-dimensional bovine collagen-elastin matrix (Matriderm®) and application for full thickness wound coverage in vivo. *Int J Mol Sci* 14: 14460–14474
50. Falanga V, Sabolinski M (1999) A bilayered living skin construct (APLIGRAF®) accelerates complete closure of hard-to-heal venous ulcers. *Wound Repair Regen* 7: 201–207
51. Chen M, Li W, Fan J, Kasahara N, Woodley D (2003) An efficient gene transduction system for studying gene function in primary human dermal fibroblasts and epidermal keratinocytes. *Clin Exp Dermatol* 28: 193–199
52. David RM, Doherty AT (2017) Viral vectors: The road to reducing genotoxicity. *Toxicolog Sci* 155: 315–325
53. Tarassoli SP, Jessop ZM, Al-Sabah A, Gao N, Whitaker S, Doak S, Whitaker IS (2018) Skin tissue engineering using 3D bioprinting: An evolving research field. *J Plast Reconstr Aesthet Surg* 71: 615–623