



Fig. 2. Pigmentation of a vitiligo lesion after RHPS treatment. (a) Vitiligo lesion on the left leg prior to the treatment, (b) pigmentation starts 6 weeks after RHPS application, (c) fully pigmented area 15 weeks after RHPS application and UVA irradiation.

or autologous (auto-RHPS) keratinocytes in the treatment of burns, donor sites (Matoušková et al., 1997) and leg ulcers (Matoušková et al., 1994). The goal of our present work was to use this unique system for autologous epidermal delivery to dermabraded vitiligo skin and to test whether melanocytes implanted in that way would be able to start pigmentation.

Epidermal cells were obtained by trypsinization of a pigmented 0.3–0.5 mm thick skin biopsy (area 1–2 cm²) of a vitiligo patient. RHPS was prepared as described previously (Matoušková et al., 1993). Briefly, thin strips of the porcine skin, prepared routinely at the Prague Burn Centre as a temporary cover for burns, were trypsinized to remove epidermis and fibroblasts. The dermis was thoroughly washed in sterile redistilled water and by drying adhered to the culture dish. Human epidermal cells were cultured on this dermal matrix using the 3T3 feeder layer technique (Matoušková et al., 1993). The presence of melanocytes in the cultured epidermis was determined by L-3,4-dihydroxyphenyl-alanine (DOPA) staining. The culture was washed with PBS,