



DERMATOPATHOLOGY

## THE CONTRIBUTION OF DERMATO(PATHO)LOGY IN THE FOLLOW-UP OF VASCULARIZED COMPOSITE TISSUE ALLOGRAFTS (HANDS, FACE)

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Background: Vascularized Composite Tissue Allografts (VCA) include several heterogeneous tissues, such as skin, vessels, nerves and bones. They were introduced recently as an option to restore missing, non-vital body parts, such as the hands and face, when other reconstructive techniques are not feasible or satisfactory. Up till now about 90 hand (H-VCA) and 40 face (F-VCA) allografts, respectively, have been performed worldwide. We report here the results of the dermato(patho)logical monitoring of 1à patients with VCA performed and/or followed in our hospital.

Observation: Since 1998, we have followed 7 H-VCA and 3 F-VCA. Most patients were young and had lost their hands or faces following traumas, explosions, burns or electrocution. Their maintenance immunosuppressive regimen (IST) included mainly streroids, calcineurin inhibitors and mycophenolate mofetil. All patients developed episodes of acute rejection (AR) within the first weeks/months post-graft manifesting on the skin with erythematous maculopapules, and histologically with dermal changes including lymphocytic perivascular infiltration, and occasionally also epidermal changes. These cutaneous changes form the basis of the current Banff scoring of VCA AR. Episodes of AR were reversed with an increase of the IST. Normal cutaneous sensitivity developed some weeks/months postgraft, and aside from periods of AR, the skin and adnexae looked normal. One H-VCA lost his allografts because of chronic rejection and two other H-VCA decided to have their allografts removed 3 and 11 years postgraft, respectively. 2 F-VCA died (of sepsis and lung carcinoma); both of them had previously developed chronic rejection, manifesting with changes of the skin (sclerosis, necrosis) and deep vessels (graft vasculopathy). Cutaneous side-effects of the IST were mild (superficial infections, basal cell carcinoma).





Key message: Dermato(patho)logy has an important role in the monitoring of patients with VCA; conversely, these allografts provide new insights into the biology of the skin, regarding namely the renewal of resident skin cells.

