日本香粧品学会誌　Vol. 33, No. 3, pp. 165–169 (2009)

〈講　　演〉

第 34 回日本香粧品学会 (2009)・会頭講演

メラノサイトは動く

赤坂俊英

Cell Motility of Melanocytes

Toshihide AKASAKA

Abstract

As cells of human tissues can move, melanocytes have cell motility especially in wound-healing or process of healing of vitiligo vulgaris, however, the role of melanocyte motility is still unknown. In normal epidermis melanocytes are fixed in the basal layer around by keratinocytes. Cell motilities include cell attachment, movement on surface, cell invasion and cell migration, in which cell attachment is most important role in melanocyte cell motility. The influence factors to melanocyte cell motility are extra cellular matrix, adhesion molecules, p125 FAK, and actin stress fiber. These factors also affect melanin production of fixed melanocytes, however, type of expressed factor are different in moving melanocytes. The other factors known as melanogenic paracrine cytokines including endotherin-1, vitamin D3, and α-MSH, extra violet ray B, and many growth factors affect melanocyte motility and melanin production. Melanocyte cell function may be divided against two way, melanin production in fixed and non-moving melanocyte with long and many dendrites, and cell motility in moving melanocyte with few dendrites and few melanin products. Clinically there are many pigmented epidermal tumors, which contain symbiotic melanocytes, melanophages in the tumor histologicaly, however, it is not known where the melanocyte in the tumor move from. It is proposed epidermal melanocyte around tumor contaminate into the epidermal tumor growing, and then the tumor keratinocytes express factors inducing cell motility, cell proliferation, and melanin product. There are pigmented benign and malignant epidermal tumors. The benign tumors include seborrheic keratosis, tricholemmoma, and eccrine poroma. Pigmented carcinomas *in situ* include Bowen's disease, actinic keratosis, and Paget's disease. Invasive epidermal cancer includes basal cell carcinoma, malignant tricholemmoma, amd squamous cell carcinoma. In analysis of pigmented epidermal tumor symbiotic melanocytes are much seen in follicular and eccrine tumor, and easier affected Mongolian people.

Key words: melanocyte motility, symbiosis, pigmented epidermal tumor.