

〈教育セミナー〉

## 皮膚のエイジング ——色素異常——

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### Abnormal Pigmentation: Aging in Skin

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#### Abstract

This paper summarizes the present knowledge of aging in melanocytes *in vivo* and *in vitro* and age-related hypo- and hyper-pigmented diseases. In the aged skin, focal hypo- and hyper-pigmentation (solar lentigo) is often found. Apparently this results from progressive loss of active melanocytes and focal increase in melanocyte proliferation and/or aggregation. From a decrease of normal pigmentation during wound healing or after sunlight exposure, it is suggested that the number of active melanocytes decrease in aged people. Actually, many reports have documented that there is a gradual decrease in the number of dopa-positive melanocytes in the epidermis of young *vs.* old individuals. However, aged people have hyper-pigmented lesions such as lentigo senelis, which appears in sun-exposed areas and is considered to be a hallmark of older skin. Senile leukoderma, which appears in the lower extremities and back (non sun-exposed areas), gradually increases in number with age. It was reported that more than one lesion of senile leukoderma was found in 95 and 87% of over 71-year-old Japanese men and women, respectively. Therefore, it is suggested that sunlight plays a role in maintaining the melanocyte activity. Bilateral dermal melanocytosis was first reported by Hori *et al.* (*J. Am. Acad. Dermatol.*, 10: 961, 1984). The pigmented macules gradually increase in number with age, but other factors such as sunlight and estrogen accelerate the pigmentation.

**Key words:** aging in melanocytes, solar lentigo, senile leukoderma, bilateral dermal melanocytosis.