

〈原 著〉

老人皮膚における角層機能の検索

佐々木由美子, 橋本久美子, 田上八朗*

The Study of the Function of the Stratum Corneum in the Aged Skin

Yumiko SASAKI*, Kumiko HASHIMOTO*, Hachiro TAGAMI*

Abstract

Comparison of the transepidermal water loss (TWL) from the skin of the extensor surface of the leg was undertaken between young and aged individuals by using Evaporimeter at the room temperature of 18°C which eliminated the effect of sweating. The data showed significantly lower values for the aged persons than the young individuals, as reported before under the conditions of much higher room temperatures. Hydration state of the skin surface evaluated at the same time by conductance measurements to 3.5 MHz high frequency current consistently showed lower values in the aged individuals, particularly in these with xerotic skin changes. The obtained results confirmed the concept that the barrier function of the stratum corneum of the aged persons was better than that of the young individuals. Such better water barrier function may be responsible for the xerotic skin changes chiefly mild in elderly individuals in winter.

Key words: TWL, evaporimeter, barrier function of the stratum corneum.